Yahoo Group Archive: TS-520_820_530_830 (2017)

Yahoo Group summary: KENWOOD TS-520_820_530_830

These Yahoo Groups messages were archived in WARC format by ArchiveTeam in 2017. This PDF was generated by Digital Library of Amateur Radio & Communications from the WARC files in 2026.

Date span: 2017-01-01 through 2017-04-16

Source WARC: ts-520_820_530_830.d0kBnMS.warc.gz

Source item: https://archive.org/details/yahoo-groups-2017-04-17T04-04-28Z-8e1d1d

Messages included in this PDF: 605

Yahoo replaced the domain portions of email addresses with @... in the archived messages. Characters lost in Yahoo's archived text appear as ?.

Messages are presented in ascending Yahoo message-ID order. Gaps indicate records absent from the source WARC or messages omitted from this PDF as spam.

56316. File - Message on approved membership.txt

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-01 13:03:43 UTC
From: TS-520_820_530_830@yahoogroups.com
Topic: 54481 Message: 56316

Welcome to the Yahoo Kenwood TS-520_820_530_830 Amateur Radio Group. This group is comprised of members who's interest is in maintaining and operating the Kenwood TS-520, TS-820, TS-530, TS-830, TS-510, TS-511, T-599/R599 and R820 Hybrid transceivers, transmitter and receivers. In addition, the group supports discussions covering the associated Kenwood accessories such as the VFO-520, VFO-820, VFO-230, and VFO-240 remote VFOs, the Kenwood antenna tuners, and the various Kenwood desk and hand microphones.

This is a restricted group requiring membership approval prior to receiving and posting messages to the group. To join the group simply complete the Yahoo Kenwood TS-520_820_530_830 Group's application process by clicking on the “+ Join Group” icon on the group's homepage. Select the desired method of receiving messages by clicking the appropriate radio button, then provide a brief description about yourself to include: your first name, your Amateur Radio call sign, your interest in the Kenwood hybrid radio, and the model of Kenwood hybrid you own, operate, or in the process of purchasing in the text box provided. If you are not a licensed Amateur Radio operator, no problem, simply complete the application process and provide the same information less the Amateur Radio call sign. Once you have completed the text, click the Join Group icon. Your application will be reviewed and approved by a group co-owner or Moderator. If you leave the application text box blank, your application for membership will be rejected. Simply reapply and provide the information requested and resubmit your application for membership.

New members are placed on a "Moderate" status. This means that any message a new member posts to the group must be approved by a group co-owner or Moderator before it appears on the group server for all members to see. The length of time a new member remains in a "Moderate message status" is determined by the members ability to adhere to, and follow the group's policies. The faster the new member(s) can prove they are adhering to, and following the group's policies, the quicker the new member's status will be changed to “Allowed”.

The “Allowed” status means the member can submit/post their messages without group co-owner or Moderator's approval. A member who's message status is set to “Allowed” may have their message status changed to "Moderate" if it is deemed necessary by a group co-owner or Moderator for one of the following reasons:

1. Failure to follow the group's policies after being informed by a group co-owner or Moderator
2. Knowingly violate any of the group's policies
3. Any improper behavior by the member that is deemed inappropriate by a group co-owner or Moderator

The group is moderated by both group co-owners and group Moderators. While we would like to have a group co-owner and/or Moderator present 24/7, that is not possible, as group co-owners and Moderators have a life too. Therefore, there will be times when a group co-owner and/or a moderator will not be present. This will affect the time a moderated member's messages may take to get approved/rejected. This occurs most often during major holidays Also, the group's server is not maintained by the group co-owner(s) or Moderators.

Therefore, when Yahoo has problems affecting Yahoo Groups, ALL members will simply have to wait for Yahoo to fix the problem. Group co-owners and Moderators also do not have any control over how the group's server handles attachments to messages or how message search results are provided.

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As stated above, this group has a set of policies that all members must agree to and abide by. If any member, new or old, that feels they cannot accept the group's policies, that member is free to terminate their membership at any time without notifying the group co-owners and/or Moderators.

Group's Policies:

1. Profanity of any type, regardless of the word and/or phrase(s) used in a message, is not allowed. This includes the use of abbreviation to improper words, use of symbols to substitute for letters, etc. In short, the use of profanity is NOT ALLOWED, PERIOD!!! The quickest way to get banned from this group is to use profanity!!!

2. Disrespect/Flaming any member regardless of the reason, is not allowed.

3. Taking over a thread by a member that changes the threads original subject and content, is not allowed.

4. Messages that contain as part of the message text, discussions of a member's private life are not allowed. Responses to messages are to pertain to the original message subject.

5. Long discussions that are products of an original messages are not allowed. If there are 2 or 3 members who wish to discuss a subject in more detail and at great lengths should take their discussions off the group and continue their discussions using private email addresses.

6. MESSAGES THAT DO NOT CONTAIN ACCEPTABLE MESSAGE SIGNATURES, WILL BE SUMMARILY REJECTED! It takes less than 5 seconds to ensure your message contains an acceptable message signature. There is no excuse for not adding a message signature to your messages. Political or religious signatures/statements are not permitted.

The following are examples of the ONLY acceptable message signatures:

Licensed Amateur Radio members:

Example:
“73s
John WA1ABC”

Non-licensed members

Example:

73s
Mary

If a member does not wish to include their Amateur Radio call sign in their signature, then simply use their first/given/Christian name ONLY, same as non-licensed members.

Each message signature must be positioned at the bottom of the message text and separated by at least one line.

For example:

Hi John,

Yes capacitor C25 is the right cap you should be checking. For details, review the schematic.

73s
Bill

Screen names such as JLH524 or MWPO125 are not acceptable message signatures. Screen names are acceptable ONLY when used as part of the member's email address.

The member's email address is not an acceptable message signature, regardless whether the member's name appears in the email address or not.

A member's “initials” are not acceptable as a messages signature.

A member may add up to 2 additional lines to their message signature. The additional 2 lines may contain a link to the member's website and a link to the member's Amateur Radio club etc. The addition of 3 or more lines to the message signature, listing the many different clubs the member belongs to, the positions they hold within the respective club(s), their professional position within the company the member works for, and other information is considered excessive and not allowed. The following is an example of an acceptable message signature containing two additional line:

73
Mike-w5rkl
www.w5rkl.com
Yahoo Kenwood TS-520_820_530_830 Moderator (Mike-w5rkl is no longer a Moderator, but used as an example--tnx)

In the past there have been members who state our group policies are too strict. We maintain strict group policies for 2 simple reasons:

1. To maintain good order and discipline in the group.
2. Provide a friendly group where all members are treated equally and an environment free of improper behavior

73
Yahoo Kenwood TS-520_820_530_830 Hybrid Group Co-owners and Moderators.

56317. File - Rules, For Sale or Want to buy Posts

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-01 13:03:43 UTC
From: TS-520_820_530_830@yahoogroups.com
Topic: 54620 Message: 56317

Rules pertaining to Occasional For Sale and Want to Buy Posts.

Members of the TS-520_820_530_830 Yahoo Group who have been members for at least 30 days may place " for sale" posts no more frequently than two in any 30 day period." Want to buy" posts are permitted immediately upon membership and are limited to 2 in any 30 day period.

For sale posts are limited to the sale of TS-510, 515, 520, 820, 530, 830, and the 599 series twins, as well as Kenwood accessories intended for use with these radios.
Also, group members may post "service equipment" for sale. This may include, but are not limited to: vtvms, various signal generators, and other testing/service equipment. Posts must include: the make and model of the item for sale, as well as an accurate description of its condition, and the asking price.

When the item is sold, please make a short post to that effect.

Replies and discussions regarding these posts must be taken off of this group either by direct e-mail to the seller or as directed by the seller.

Buyers and sellers are on their own. The TS-520_820_530_830 Yahoo Group, its owners, co-owners, moderators, or members other than the seller, hold no responsibility for the accuracy of the posts or the credibility of the seller or buyer.

We do not expect that members of this group will misrepresent, or in any way cheat other members. At the co-owners(s)/moderators discretion, we may choose to ban any member from making further for sale posts, or ban the member from this group entirely if we believe their posts or transactions are not of the utmost integrity.

We ask that those who buy and sell equipment as a main business not post here. We will allow posts from members who occasionally restore and sell equipment/accessories as stated above.

We expect our members to use discretion. If excessive traffic develops as a direct result of these postings, they may have to be discontinued.

Walter Breining, N9WB
Joseph T Stiles, WB7UQU

56318. NEW TO GROUP WITH A 820S

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-01 17:28:37 UTC
From: johnsonguysharon@...
Topic: 56318 Message: 56318

HI ALL,
NAME GUY, N4DEL CENTRAL FLORIDA.
I HAVE JUST RECEIVED A TS-820S WITHOUT MIKE FROM A SK.
THE UNIT LOOKS IN GREAT CONDITION , BUT HAS
SOME PROBLEMS. THE DISPLAY IS STUCK WITH A SINGLE
DIGIT BEING DISPLAYED. DOES NOT CHANGE TURNING TUNE
KNOB. IT IS VERY CLEAN IN AND OUT. I HAVE NO MANUALS,
BUT WOULD LIKE TO BRING IT BACK TO LIFE. IF SOMEONE
IN FLORIDA REPAIRS OR ANY THOUGHTS, IT WOULD BE OF
GREAT HELP. I HAVE LIMITED TEST GEAR. ALSO SIGHT IS
TIRED LIKE THE 820S. HI!
HAPPY NEW YEAR AND THANKS FOR GROUP AND HELP

GUY N4DEL

56319. KENWOOD HYBRID NET UPDATE (January 1, 2017)

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-01 19:30:30 UTC
From: Mark Gilger
Topic: 56319 Message: 56319

Net Info:
Saturday: 7.235 @ 3:30pm Eastern following the Swan Tech Net
Sunday: 14.316 @ 1800 UTC following the ICOM net

Web Site:
<http://www.wb4hfn.com/KENWOOD/KenwoodHomePage.htm>http://www.wb4hfn.com/KENWOOD/KenwoodHomePage.htm

The net started its existence on November 1st,
2011. The yearly check-in totals are posted at the bottom of this message.

The Saturday net was run by me, WB0IQK. There
were 11 stations checking in under POOR band conditions.

We had the following number of radios checking in.
1 running TS-520(x)
4 running TS-530(x)
2 running TS-820(x)
3 running TS-830S
1 running TS-510
0 running TS-511
0 running TS-515
0 running 599 twins
0 running TS-900

I was running my TS-830S + Drake L-4B amplifier.

The Sunday net was run by me, WB0IQK. There were
14 stations checking in under POOR band conditions.

We had the following number of radios checking in.
2 running TS-520(x)
0 running TS-530(x)
0 running TS-820(x)
2 running TS-830S
0 running TS-510
0 running TS-511
0 running TS-515
0 running 599 twins
0 running TS-900

I was running my TS-830S + Drake L-4B amplifier.

We have been having several people checking in
regularly with their TS-430, TS-440, and
TS-940□s, which of course is not a hybrid,
although over 30+ years old. Everyone is welcome

as long as they have an interest in the older equipment.

If anyone would be interested in filling in as a
net control station, please send me an email.
Currently it's just myself, Jimmy, WB2KNR, and
Greg, WQ0P . I would like to get several more. If
we do, we can alternate so everyone might be on a
3-4 week rotation. It's a lot of fun and a good
way to make sure you station is optimized.

For anyone that has not heard, we have a new web
site that WB4HFN is hosting. He currently has a
very nice site for Drake, Collins and Heathkit
and now Kenwood Hybrids. Good quality manuals
plus sale flyers and brochures will be found
here, along with user supplied information for all Hybrids.

His URL is:
<http://www.wb4hfn.com/KENWOOD/KenwoodHomePage.htm>http://www.wb4hfn.com/KENWOOD/KenwoodHo
mePage.htm

To date, we have had the following check-in:

Nov. 2011 ☐ Oct. 2012 Saturday total 754
check-ins, Sunday total 563 check-ins
Nov. 2012 - Oct. 2013 Saturdays total 828 check-ins, Sunday total 609 check-ins
Nov. 2013 - Oct. 2014 Saturdays total 842 check-ins, Sunday total 744 check-ins
Nov. 2014 ☐ Oct 2015 Saturdays total 962 check-ins, Sunday total 669 check-ins
Nov. 2015 ☐ Oct 2016 Saturdays total 807 check-ins, Sunday total 628 check-ins

November 2016, Saturday net total = 80, Sunday total = 68
December 2016, Saturday net total = 73, Sunday total = 69 (Month to date)

Net Info:
Saturday: 7.235 @ 3:30 Eastern following the Swan Tech Net
Sunday: 14.316 @ 1800 UTC following the ICOM net

Web Site:
<http://www.wb4hfn.com/KENWOOD/KenwoodHomePage.htm>http://www.wb4hfn.com/KENWOOD/KenwoodHo
mePage.htm

73's,
Mark, WB0IQK

56320. TS-820 avalible.

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-01 21:04:10 UTC
From: n4isfino@...
Topic: 56320 Message: 56320

N4ISF here. I have this 820 on my desk, I should do something with it. Nice looking radio, I used it almost every day for a year about 5 years ago, at one point the heater switch started loosing contact so I did the easy fix and shorted the switch, making the final tube filament on all the time the main switch is on. (only on one hour per day for a net) But then gradually it started intermittently shifting the digital frequency display off drastically (just the display, not the actual received signal) and at the same time letting in extra QRM on the received signal making it more difficult to hear the on frequency signals. So it needs a little work. Transmit section always worked good, from TN was always heard well over the east half of the USA on 80, with an inverted V. Seems like I paid 350 for it in perfect condition. Make me an offer.

56321. Re: NEW TO GROUP WITH A 820S

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-01 19:28:49 UTC
From: Mark Gilger
Topic: 56318 Message: 56321

Guy,
Welcome to the net. If you go to the following link, go into the Articles & Information section you will find a document on Service & Parts Resources. There is a list of people that do repair and you might find someone close. You can also download the manuals that you need.

http://wb4hfn.com/KENWOOD/KenwoodHomePage.htm

73's,
Mark, WB0IQK

56322. TS830S 9 VLOT BUSS FAILURE

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-02 17:16:42 UTC
From: hpdd709@...
Topic: 56322 Message: 56322

Yesterday my TS830S had a Digital Dsplay failure..No Freq. LEDS at all, along with no VFO RF ATT, NOTCH and FIX LEDs when pressed in or out.. TP 6 on the X49-1140-00, AF BOARD, does not indicate the presence of 9 volts at all. I am assuming this might be the problem.I can not seem to find where the 9 volt buss starts. If memory serves me and most times it does not lately, I think the X49-1140-00, AF board and not the X43-1370-00, Rectifier Unit. My eyes do not function as well as they once did...
I also cleaned the Fix switch.

As far as test equipment here...I have a Fluke DVM only...

Any assistance from any of the group would and is appreciated as to a likely fix or any other locations I might look into...I see no discolored or any possible damaged components

73,

Mike George K3MG

A good email for me is: hpdd709@gmail.com

56323. Re: TS830S 9 VLOT BUSS FAILURE

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-02 18:24:54 UTC
From: wagstw46@...
Topic: 56322 Message: 56323

Mike:

The 12vdc and 9vdc supplies are Linear Series Pass regulated supplies on the AF Board. Q34 is 12vdc and Q30 is 9vdc.

Do you have regulated 12vdc at the wire wrap terminal post?

If not, do you have approx 18vdc to the board on the 14A supply wire wrap terminal?

Terry K9TW

56324. Re: TS830S 9 VLOT BUSS FAILURE

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-02 19:13:56 UTC
From: Michael George
Topic: 56322 Message: 56324

Terry,

Now I know for sure that the 9 volt buss starts from Q34 and Q30.. on the AF board. I see no 12 volts (0 Volts) on the collector of Q34 nor the emitter of Q30 . I do see 19.39 volts on the 14A supply line...I think I will remove the AF board and do some resistance readings Q30 and Q 34. What is your opinion? I have an old AF board around here somewhere.

Mike/K3MG

On Mon, Jan 2, 2017 at 1:28 PM, Michael George <hpdd709@...> wrote:
> Thanks Terry, will take a look.. I appreciate your speedy response.
>
> Mike/K3MG

56325. Re: TS830S 9 VLOT BUSS FAILURE

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-02 18:28:47 UTC
From: Michael George
Topic: 56322 Message: 56325

Thanks Terry, will take a look.. I appreciate your speedy response.

Mike/K3MG

56326. Re: [TS-520_820_530_830] TS 530S Dip in wrong part of plate dial?

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-02 21:25:08 UTC
From: majhenry
Topic: 56295 Message: 56326

Has the knob slipped on the shaft ?

Otherwise, tune up on an antenna . If it loads up ok,, then use it don't fix it

Bryan G3GVB

On 25 December 2016 at 05:50, remingtonhill1@... [TS-520_820_530_830] <TS-520_820_530_830@yahoogroups.com> wrote:

>
>
> Sorry if this is a double post, I don't see my first attempt.
>
>
> My radio tunes up all bands normally, but 80 meters. When in tune mode in band "3.5" , and dipping the plate, it doesn't dip until the plate knob is positioned in the 7 Mhz area of the plate dial (upper part). It's only at this part of the plate dial is it putting out the appropriate power in tune mode (~15-20 watts). I didn't try tuning at full power because of this anomaly. I'm doing this into a dummy load.
>
>
> Any Ideas?
>
>
> Thanks,
> Shane
>
>
> 73, KG5RJS
>
>
>
>

56327. Re: [TS-520_820_530_830] TS-820 avalible.

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-02 00:42:37 UTC
From: darrell wyatt
Topic: 56320 Message: 56327

can I see some pictures of this rig?thanks 73kk4rsv
 Darrell Wyatt

From: "n4isfino@... [TS-520_820_530_830]" <TS-520_820_530_830@yahoogroups.com>
To: TS-520_820_530_830@yahoogroups.com
Sent: Sunday, January 1, 2017 1:04 PM
Subject: [TS-520_820_530_830] TS-820 avalible.

N4ISF here. I have this 820 on my desk, I should do something with it. Nice looking radio, I used it almost every day for a year about 5 years ago, at one point the heater switch started loosing contact so I did the easy fix and shorted the switch, making the final tube filament on all the time the main switch is on. (only on one hour per day for a net) But then gradually it started intermittently shifting the digital frequency display off drastically (just the display, not the actual received signal) and at the same time letting in extra QRM on the received signal making it more difficult to hear the on frequency signals. So it needs a little work. Transmit section always worked good, from TN was always heard well over the east half of the USA on 80, with an inverted V. Seems like I paid 350 for it in perfect condition. Make me an offer.

56328. RE: [TS-520_820_530_830] Re: NEW TO GROUP WITH A 820S

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-02 18:59:57 UTC
From: <johnsonguysharon@...>
Topic: 56318 Message: 56328

Thanks Mark, will check it out.

Sent from Mail for Windows 10

From: Mark Gilger mgilger@... [TS-520_820_530_830]
Sent: Monday, January 2, 2017 4:23 AM
To: TS-520_820_530_830@yahoogroups.com
Subject: [TS-520_820_530_830] Re: NEW TO GROUP WITH A 820S

Guy,
Welcome to the net. If you go to the following link, go into the
Articles & Information section you will find a document on Service &
Parts Resources. There is a list of people that do repair and you
might find someone close. You can also download the manuals that you need.

http://wb4hfn.com/KENWOOD/KenwoodHomePage.htm

73's,
Mark, WB0IQK

This email has been checked for viruses by Avast antivirus software.
https://www.avast.com/antivirus

[Non-text portions of this message have been removed]

56329. Interesting comparison

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-02 11:37:52 UTC
From: marc-stern@...
Topic: 56329 Message: 56329

All,

I am the proud possessor or a TS530SP and a late model Heathkit SB-1400 (aka FT-747 in Heath garb). I have noticed lately that Heath seems to have lacked sensitivity so I decided to hook up my 530 again and listen around on various bands. I tried 20 yesterday and the band was pretty quiet, apart from a couple of stations -- one guy running a KW into six (yes 6, he said) 20M beams on a 200-foot tower. (I didn't do the math, but that is a real cloud burner!)

Okay now the reason for this posting -- the Kenwood is in good shape, by the way -- so it is not about that, though I did have a stick bandswitch not too long ago -- the Heath.

The station I was listening to on the Kenwood was roughly 20 over 9 with fantastic audio (lots of that is the Kenwood's engineering I will admit) When I swapped the exact antenna setup over to the Heath, I lost about 5 S-points and the signal did disappear into the mud and began to phase, as well. Back to the Kenwood and the signal was fine.

The moral to this is I do believe the Heath is numb and may have been since I picked it up last year on eBay, where it will soon be headed at a discounted price and with proper caveats. It will make someone a great starter rig, provided they have the dinero to upgrade soon after.

Thanks for reading. Happy New Year de WA1R

56330. Re: TS830S 9 VLOT BUSS FAILURE

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-03 01:11:42 UTC
From: wagstw46@...
Topic: 56322 Message: 56330

I have never found taking resistance readings to be of much value. Always better to take voltage and signal readings if circuit can be powered. What is Q34 B-E? Base should be approx 0.7vdc lower than Emitter to bias Q34 on. If BE junction is forward biased and no voltage at Collector then likely Q34 pass transistor has failed. Not a common failure. C81 could be shorted.

Rare for Q31/Q32 comparator to be bad or Q33 Error Amp to be bad.

Have to roll board over to access foil side. Must exercise extreme caution as will be near 900vdc at the HV filter caps. I would make a heavy cardboard barrier to cover the HV filter caps and the HV Rect Board areas.

Do you have a stiff 12vdc bench supply? Could momentarily apply it to the 12vdc wire wrap post and see if rig comes alive.

You may have to just shot gun parts replacements. Maybe harvest from your spare AF board. Replace at least Q34, C81, reference zener D26 and maybe R132,

One resistance reading that may be helpful is from 12vdc wire wrap terminal post to chassis ground. Approximately 46 ohms. If you have an ESR meter about 0.16 ohms.

Terry K9TW

56331. RE: [TS-520_820_530_830] TS 530S Dip in wrong part of plate dial?

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-03 02:18:58 UTC
From: David Boothe
Topic: 56295 Message: 56331

Shane,

I think you're OK on this. If you look at the white bands designating the tuning ranges on the PLATE knob, you'll see that the band for "3.5" (75/80M) is very wide. Depending on the part of the band you're tuning up on, the pointer can normally fall along the width of this range and may overlap the "7" band, which is quite narrow in comparison. In other words, if your pointer is pointing at the upper part of the "7" tuning band for the dip on the "3.5" (80M) band, then it's also pointing right in the middle of the "3.5" band stripe, correct?

Dave K3DWB

-----Original Message-----
From: TS-520_820_530_830@yahoogroups.com
[mailto:TS-520_820_530_830@yahoogroups.com]
Sent: Monday, January 02, 2017 4:25 PM
To: TS-520_820_530_830@yahoogroups.com
Subject: Re: [TS-520_820_530_830] TS 530S Dip in wrong part of plate dial?

Has the knob slipped on the shaft ?

Otherwise, tune up on an antenna . If it loads up ok,, then use it don't fix it

Bryan G3GVB

On 25 December 2016 at 05:50, remingtonhill1@... [TS-520_820_530_830] <TS-520_820_530_830@yahoogroups.com> wrote:

Sorry if this is a double post, I don't see my first attempt.

My radio tunes up all bands normally, but 80 meters. When in tune mode in band "3.5" , and dipping the plate, it doesn't dip until the plate knob is positioned in the 7 Mhz area of the plate dial (upper part). It's only at this part of the plate dial is it putting out the appropriate power in tune mode (~15-20 watts). I didn't try tuning at full power because of this anomaly. I'm doing this into a dummy load.

Any Ideas?

Thanks,
Shane

73, KG5RJS

56332. (no subject)

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-03 02:25:41 UTC
From: Wayne Bowyer
Topic: 56332 Message: 56332

I've a TS-830s I'm repairing and cleaning up. It had been owned at one time by a cb'er and some diddling with the counter circuit board had taken place. (I didn't realize this particular rig model was a target for the cb'ers because of a lack of AM)
But regardless it had been. A dpdt switch installed on the rear panel along with a couple of leads to one of the ic's as well as some diodes cut and/or wired to the switch. I've removed the switch, cleaned up the apparent wiring changes and will be searching for a couple of diodes that were removed/cut. I've also had to repair/replace some burnt/cracked resistors along with a burnt plate choke and other damaged components. TX is working fine now. I'll be going thru the alignment procedure once I'm done with removing/restoring the right parts. Any thing I should be looking for or anything I'm missing? I'll be making sure the voltages are within spec to the tubes. I'm told changing the screen voltage to a higher value is a popular mod by the folks with the golden screwdriver. So I'll be checking that.

Wayne
n4eyz

56333. Re: [TS-520_820_530_830] Re: TS-520/820 PA Modifications

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-03 02:58:46 UTC
From: rogers.engineering@...
Topic: 56282 Message: 56333

Thanks for the great reply, Terry. I know the choke value is higher than the original, it must be meant for a different model (520S / 820 ?). I also noticed there is an identical 3 uH choke connected to the Remote socket at pin-6. This could probably be used as a replacement if one is not going to use the Remote function.

The root cause was probably the result of one of the 6146Bs flashing over. This happened when a faulty RF jumper cable to the antenna tuner opened (no load = bad news!). I have nearly completed the PA section re-build and will report on the results when done.

Thanks Again and Best Regards,

John
73, w4wav

56334. Re: [TS-520_820_530_830]

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-03 05:05:02 UTC
From: Wes Will
Topic: 56332 Message: 56334

> the tubes. I'm told changing the screen voltage to a higher value is a
> popular mod by the folks with the golden screwdriver. So I'll be checking
> that.
> Wayne
> n4eyz

Check they haven't changed the 210 connections on the rectifier board to the 300 terminals. That seems to be the usual path to getting a tenth of a percent more power out of a hybrid rig, by the usual run-of-the-mill imbecile Chicken-Bander with a soldering iron and nothing like enough sense to be using it.

"Inverse Square Law" is utterly Greek to these people.

I had to unscrew the inscrutable on my 520SE because of this kind of modification. 10-meter moved to 11-meters, crystals changed, 'power increase' idiocy, all of it. Once I get some kind of antenna back up (blame that on extreme weather, as in sustained 150 km/hr winds, but "climate change" is "junk science," you know), I'll finish tweaking the rig and see how well the repairs went.

Best of luck getting your rig back to where it ought to be.

--
Wes Will
wes@...
N9KDY

56335. Re: TS-830S No Transmit All Bands

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-03 06:41:18 UTC
From: scottandalene@...
Topic: 56036 Message: 56335

Hi Terry,

Now back from the holidays I have had time to make some more measurements. My homemade Rf probe uses two germanium diodes in series. My procedure for Rf measurements was to Have the SG switch off, the carrier pot at 12:00 (unless I was swinging it from full CCW to CW), and the Drive control at 12:00. With heaters on, then flip to send.

1. CV at BM --measured CV at Conn. 8-result was 0 to 9 vdc on swinging carrier pot from full CCW to CW.
2. Measured CV at cathode of D30 at BM--result was 0 to 580 mvdc on moving the carrier level pot CCW to CW.
3. Measured TIF at Conn. 6 with Rf probe--did not see any significant Rf voltage. So I then measured TP-4 on the Rf board with the Rf probe and the Carrier pot full CW while swing the drive each side of 12:00. Result was very low Rf voltage 18 mv to 40 mv. Since this should be 2-3 rms Rf volts, I think I have a problem.

It appears I am not getting TIF from the IF Board. So I made further measurements as follows.

4. Measured carrier at input of BM--TP-2 with Rf probe. Result was no significant Rf voltage.
5. The same result when measuring carrier at output of BM-cathode of D34--no significant Rf voltage.
6. As I reported in a previous post, Q29 does have ALC bias voltage of 2.95 vdc at gate 2. So I tried to measure Rf voltage at the drain. Since I am not sure which pin is the drain-I measured at all the pins other than gate 2 and did not see a significant Rf voltage.

Is it time for me to lift the IF board and look at the undersides of the molex connectors and associated traces? I really appreciate your thoughts on this problem.

Thank you,
Scott, N6CIC

56336. Re: TS-830S No Transmit All Bands

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-03 12:04:28 UTC
From: wagstw46@...
Topic: 56036 Message: 56336

Scott:

You are doing good job of taking readings and report detail is good, but you need to think about the what and why and not just take a series of readings. When you dont get the expected results need to work back from there and not go forward on the signal path. Doesnt make sense to proceed down the chain when required input to the BM is missing.

Also, did you test your RF probe to see if it is good?

Do that by measuring RF sig gen output or go to known higher RF levels in your TS830. Try measuring 8375 osc level on IF board at TP-1 or try measuring the VCO level at TP-3 on the RF board. Both are approx 1.0rms RF volts which is more than enough to forward bias your two diodes. VFO output is around 200mv rms. With single diode probe probably see around 1/2 of that or 100mv and with two diodes maybe 50mv? Have to overcome both barrier junction voltages. Two diode probe isnt the instrument of choice for troubleshooting low level RF signals.

You certainly wont be able to measure TIF with a two diode probe. TIF will be low around 40mv rms. You can temporarily short out one of the probes two diodes. Can measure max of approx 30 rms RF volts with single germanium diode and can see some "indication" around 50mv to 100mv. (indication but not accurately measure).

I am quite certain that previously told you that you need an O-scope or RF millivolt meter to measure the TIF signal. Maybe can borrow scope from local club member?

Regards putting on your thinking cap:
When you measured 455khz Carrier at TP-2 input to the BM and found none there was no reason to then measure at the BM ring diodes. Have to ask....Did you flip to Send to make this measurement? Normal level will be in excess of 1.0rms rf volts and with single diode probe probably see around 800mv and with two diode probe around 600mv. If you have approx 600mv at TP-2 then OK to move forward on the path. That would be to the IF filter switching diodes. If have RF into filter and none out can temporarily jumper across the filter with .047uf cap to see if rig comes alive. If now can peak ALC in Tune mode you know to trouble shoot the filter switching diodes by first measuring dc bias voltages.

If you really have zero rf at TP-2 the next logical move would have been to move back to TP-3 on the IF board near Molex Conn 13 and trim pot VR-8 and look for approx 300mv of 8.830 mhz Carrier. If nothing at TP-3 then measure at Conn 13. If nothing at Conn 13 then go to other end of the mini-coax at the PLL board and measure at Conn 7. Again cant use a 2 diode probe to "measure" these low levels.

Not making fun of you. Just trying to provide you with a way of thinking. A logical thought process for signal tracing. Perhaps looking at the Block diagram would help you understand where the 455khz carrier at TP-2 comes from that supplies the BM. Look at Mixer Q16 and will see it gets RF from two sources. 1. Q13 8.375mhz oscillator on the IF board and 2. Q41 8.830 mhz osc on the PLL board.

If you have no 455khz carrier at TP-2 at BM then next step would be to confirm that both Carrier Oscillators that Q16 Mixer requires are present on the IF board. By the way depending on what schematic you have TP-3 isnt shown on the IF board.

I wouldnt be in too big a hurry to remove the IF board until you have determined why you have no TIF signal.

Lastly, as to not knowing which is the Drain lead of Q29 TIF amp look at the Schematic and look at IF board X ray view to determine the leads. Looking down on device Drain is bottom right lead. You can see L29 and C160 which tells you which lead is the Drain.

Maybe we should take this off the reflector? Also, I would prefer that you call me as can accomplish this work much faster than with keystrokes.

Terry K9TW

---In TS-520_820_530_830@yahoogroups.com, <scottandalene@...> wrote :

Hi Terry,

Now back from the holidays I have had time to make some more measurements. My homemade Rf probe uses two germanium diodes in series. My procedure for Rf measurements was to Have the SG switch off, the carrier pot at 12:00 (unless I was swinging it from full CCW to CW), and the Drive control at 12:00. With heaters on, then flip to send.

1. CV at BM --measured CV at Conn. 8-result was 0 to 9 vdc on swinging carrier pot from full CCW to CW.
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It appears I am not getting TIF from the IF Board. So I made further measurements as follows.

4. Measured carrier at input of BM--TP-2 with Rf probe. Result was no significant Rf voltage.
5. The same result when measuring carrier at output of BM-cathode of D34--no significant Rf voltage.
6. As I reported in a previous post, Q29 does have ALC bias voltage of 2.95 vdc at gate 2. So I tried to measure Rf voltage at the drain. Since I am not sure which pin is the drain-I measured at all the pins other than gate 2 and did not see a significant Rf voltage.

Is it time for me to lift the IF board and look at the undersides of the molex connectors and associated traces? I really appreciate your thoughts on this problem.

Thank you,
Scott, N6CIC

56337. RE: [TS-520_820_530_830]

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-03 15:45:20 UTC
From: David Boothe
Topic: 56332 Message: 56337

Wayne,

Great advice from Wes below-I found these mods on radios I have restored and had to un-do them. I would add a couple of (less likely) things to check:

1. Check value of 3.3K R37, the screen resistor for the 12BY7A on the RF board. This can be stressed by power supply 'hot rodding' described
2. Check R78 on the AF board. This is in the bias circuit and I found this (equivalent) resistor replaced with a lower value on a couple of radios, apparently to provide additional bias for weak tubes (inevitable when running them hot).
3. Check around the speech processor for any mods. I've found a couple of hacks that may have been involved with mis-informed approaches to 'hotter audio modulation'

Good luck!

Dave K3DWB

-----Original Message-----
From: TS-520_820_530_830@yahoogroups.com
[mailto:TS-520_820_530_830@yahoogroups.com]
Sent: Tuesday, January 03, 2017 12:05 AM
To: TS-520_820_530_830@yahoogroups.com
Subject: Re: [TS-520_820_530_830]

> the tubes. I'm told changing the screen voltage to a higher value is a
> popular mod by the folks with the golden screwdriver. So I'll be checking
> that.
> Wayne
> n4eyz

Check they haven't changed the 210 connections on the rectifier board to the

300 terminals. That seems to be the usual path to getting a tenth of a percent more power out of a hybrid rig, by the usual run-of-the-mill imbecile
Chicken-Bander with a soldering iron and nothing like enough sense to be using
it.

"Inverse Square Law" is utterly Greek to these people.

I had to unscrew the inscrutable on my 520SE because of this kind of modification. 10-meter moved to 11-meters, crystals changed, 'power increase'
idiocy, all of it. Once I get some kind of antenna back up (blame that on

extreme weather, as in sustained 150 km/hr winds, but "climate change" is "junk science," you know), I'll finish tweaking the rig and see how well the

repairs went.

Best of luck getting your rig back to where it ought to be.

--
Wes Will
wes@...
N9KDY

56338. Re: TS-830S No Transmit All Bands

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-03 16:48:12 UTC
From: scottandalene@...
Topic: 56036 Message: 56338

Hi Terry,

OK-I will short out one of the germanium diodes and then test it as you suggest. I will move backwards from the BM to try to determine why I have no TIF signal. Yes I did flip to "Send" for my measurements. I will scout around to see if I can borrow an O-scope. I am a member of the Stanislaus Amateur Radio Club (Modesto, CA). Lastly I will call you next time I have a report on this problem. I have ordered the blown up schematic from Ken as I find it difficult to read the voltages on my copy of the Service Manual.

Thank you for your analysis and insight!

Scott, N6CIC

56339. RE: [TS-520_820_530_830] TS 530S Dip in wrong part of plate dial?

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-03 18:51:35 UTC
From: remingtonhill1@...
Topic: 56295 Message: 56339

So I discovered that when I set the frequency at about 3.5 MHz, the radio tunes up properly with the plate knob in the 3.5 MHz position. When I tune up at 3.8 MHz - 3.9 MHz, the radio won't tune unless the Plate knob is well into the 7 MHz range on the dial.

In the end, it works fine, I guess it's just an anomaly with my radio, if others don't notice the same thing.

Thanks for the help!
Shane

73, KG5RJS

56340. Re: [TS-520_820_530_830] TS 530S Dip in wrong part of plate dial?

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-03 19:15:47 UTC
From: Mike Millen
Topic: 56295 Message: 56340

On 03/01/2017 18:51, remingtonhill1@... [TS-520_820_530_830] wrote:
>
> So I discovered that when I set the frequency at about 3.5 MHz, the
> radio tunes up properly with the plate knob in the 3.5 MHz position.
> When I tune up at 3.8 MHz - 3.9 MHz, the radio won't tune unless the
> Plate knob is well into the 7 MHz range on the dial.
>
>
> In the end, it works fine, I guess it's just an anomaly with my radio,
> if others don't notice the same thing.
>
> Thanks for the help!
> Shane
>
> 73, KG5RJS

That's not an anomaly, that's correct!

The 3.5MHz area is indicated by the thick white line... right up to 12
O'clock, where it says 1.8.
The 1.8MHz range is indicated by the thin white line, nearest to the
knob centre... over 3/4 of the total movement.
The 7MHz portion is marked by tiny "posts" either side of the 7.
14, 21 & 28MHz each have small but obvious thick markers underneath them.

Easy once you see it. :-)
73s,
Mike - M0MLM

56341. Re: [TS-520_820_530_830] TS 530S Dip in wrong part of plate dial?

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-03 19:19:53 UTC
From: Joseph Stiles
Topic: 56295 Message: 56341

Shane,
Your radio does not have an "anomaly." Look at the white arc for the 3.5MHz range of the plate tuning control...it starts at 9 o'clock position and goes into the "10MHZ" range to the 12 o'clock position....entirely normal...same goes for the 830....
 73
Joe wb7uqu

On Tuesday, January 3, 2017 11:07 AM, "remingtonhill1@... [TS-520_820_530_830]" <TS-520_820_530_830@yahoogroups.com> wrote:

  So I discovered that when I set the frequency at about 3.5 MHz, the radio tunes up properly with the plate knob in the 3.5 MHz position. When I tune up at 3.8 MHz - 3.9 MHz, the radio won't tune unless the Plate knob is well into the 7 MHz range on the dial.
In the end, it works fine, I guess it's just an anomaly with my radio, if others don't notice the same thing.
Thanks for the help!Shane

73, KG5RJS

56342. Re: TS-830S No Transmit All Bands

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-03 19:35:41 UTC
From: wagstw46@...
Topic: 56036 Message: 56342

OK with one diode remember you cannot move beyond the output of the TX Mixer on RF board (RF drive input to the control grid of the 12BY7A Driver tube). Dont try to measure the RF drive at Plate of the Driver tube or at the Control grids of the Final tubes. Some folks do that by riding the CAR Level pot and when the RF voltage gets to approx 30v they stop advancing the CAR pot. Can be a bit tricky and easy way to blow up your RF probe. At this point in the troubleshooting no need to move beyond TP- 4 on the RF board.

Go back to TP-2 at input to the BM and repeat test once you have confirmed that you have a good single diode RF probe. If nothing there then go to TP-3 near Conn 13 and confirm that you have Carrier Osc. Should be 300mv if it has aligned properly, but again with one germanium diode most likely you will see something on the order of 170 to 180mv.

Then go to TP-1 and verify you have good 8.375mhz oscillator. Should be approx 1.0rms volts. Again with single diode maybe around 800mv to 850mv.

I would appreciate it if you would call with results and discuss the next moves. Should have been enough info in most recent previous response to get you going for awhile.

Terry K9TW

56343. Questions on diodes on a TS-830s counter unit board

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-04 17:51:39 UTC
From: Wayne Bowyer
Topic: 56343 Message: 56343

I'm removing some 11m mods on an 830s. It looks like some diodes have been completely removed, a couple others simply cut (but still there) and then the ones removed were replaced by diodes and then the diodes cut out but the long leads remain. I want to replace the ones that need to be there. For example D107, D108, and D109 were apparently removed but replaced with a jumper and then that jumper has been cut.

D101 has been cut. D102, D103 and D104 are missing. These are all present on the schematic but I wonder do they need to be there? I understand the early 830's were shipped with the new WARC bands but they had the TX ability disabled for those bands. Wondering what to replace and what to leave alone.

Wayne
n4eyz

56344. Re: [TS-520_820_530_830] Questions on diodes on a TS-830s counter unit board

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-04 19:04:00 UTC
From: Joseph Stiles
Topic: 56343 Message: 56344

Wayne,
The diodes in question are involved in the switching matrix to the PLL. I do not have a 100% grasp on the operation of this matrix, but I do know that all the cut or missing diodes are going to have to be repaired/replaced. Also, they are not involved in the TX activation of the WARC bands. Diodes D4, D5, and D6 on the front of the RF board are used to individually activate the TX of the three WARC bands, or if you want to activate all three you cut the small blue wire that comes off of connector 6 pin 1 (TOF terminal) on the AF board. Pg 28 Section 6.5 of the 830S Instruction Manual has info. You may want to see if Walter Dilley may haveone: walter.dilley"at"gmail"dot"com It sound like this board has been butchered pretty bad.
 73
Joe wb7uqu

On Wednesday, January 4, 2017 10:29 AM, "Wayne Bowyer wayne.bowyer@... [TS-520_820_530_830]" <TS-520_820_530_830@yahoogroups.com> wrote:

  I'm removing some 11m mods on an 830s. It looks like some diodes have been completely removed, a couple others simply cut (but still there) and then the ones removed were replaced by diodes and then the diodes cut out but the long leads remain. I want to replace the ones that need to be there. For example D107, D108, and D109 were apparently removed but replaced with a jumper and then that jumper has been cut.

D101 has been cut. D102, D103 and D104 are missing. These are all present on the schematic but I wonder do they need to be there? I understand the early 830's were shipped with the new WARC bands but they had the TX ability disabled for those bands. Wondering what to replace and what to leave alone.

Wayne
n4eyz

56345. Re: [TS-520_820_530_830] Re: TS-520/820 PA Modifications

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-05 00:46:38 UTC
From: wagstw46@...
Topic: 56282 Message: 56345

Yes that choke is mounted on a phenolic terminal strip near the remote socket and could be moved to PA cage.

There is a reason for the value of this small VHF choke and why it is located where it is at base of the RF plate choke and a reason why different values depending on the model.

Any RF plate choke must offer sufficient reactance at the transmitters lowest operating frequency without parking any series resonant "holes" at or near any of the operating bands. Not an easy task especially for a solenoid wound choke. One way to accomplish that is to space or section wind the choke to break up the distributed turn to turn capacitance. Problem is in order to lessen the mutual coupling between the sections the choke the former has to be pretty tall and wouldnt fit in the Hybrid PA cage. Other way to do it is to add additional inductance in series with the main RF plate choke and to add the inductance physically at a right angle to the main winding to lessen the mutual coupling. The latter is what KW chose. The difference in choke values is due to the addition of 160 meters to later Hybrids and the need to have sufficient inductive reactance for that band.

So not a good idea to replace your VHF choke with one of different value.

As to your root cause determination I dont think it is damage from 6146 arc over, When that occurs the cathode meter shunt resistor usually leave violently and quickly. Having an open feedline the weakest link due to high impedance and corresponding high RF voltage at the SO-239 is the Plate Load capacitor. This cap has broadcast band spacing. Suggest you check it carefully to make sure it didnt arc over. Actually you didnt have a total open or infinite impedance being presented. There is the resistive divider for the RF sniffer present so probably looking and at 10 or 11k ohm load. Still pretty high SWR. Normal RF voltage across the Plate load cap is approx 71rms rf volts at 100 watts. Will run up to around 200rms rf volts with the PL-259 unscrewed. 200 x 1.414 = 283 peak RF volts. Usually wont arc over at this level, but it may especially if any dust accumulation.

Still looks more like thermal runaway to me. Up to you if you want to confirm that the bias supply is good before turning on the heaters.

Terry K9TW

56346. Re: [TS-520_820_530_830] Questions on diodes on a TS-830s counter unit board

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-05 01:29:35 UTC
From: wayne.bowyer@...
Topic: 56343 Message: 56346

Thanks Joe, I'll repair/replace all those affected. I'll also contact Walter too.

73's
Wayne
n4eyz

56347. Re: [TS-520_820_530_830] Questions on diodes on a TS-830s counter unit board

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-05 09:27:54 UTC
From: Martin Jangowski
Topic: 56343 Message: 56347

Am 04.01.2017 um 18:51 schrieb Wayne Bowyer wayne.bowyer@...
[TS-520_820_530_830]:
> I'm removing some 11m mods on an 830s. It looks like some diodes have
> been completely removed, a couple others simply cut (but still there)
> and then the ones removed were replaced by diodes and then the diodes
> cut out but the long leads remain. I want to replace the ones that
> need to be there. For example D107, D108, and D109 were apparently
> removed but replaced with a jumper and then that jumper has been cut.

The TS830 counter is technology from the late 1970s. The counter chip gets its frequency from the VCO, this is always in the range from 5.5 to 6.0MHz (correct me if I'm wrong, can't look at the manual just now). The diode matrix sets the starting point for the display, nothing else!

Example: band switch set to 14. VCO set at 0. Frequency input is 5.5MHz. The counter chip gets the information (via diode matrix) that 5.5MHz from the VCO is really 14.000 MHz. Turn VCO wheel to 200, VCO frequency goes up to 5.7MHz (5.5M + 200 kHz). Counter displays 14.000 + 0.200 = 14.200 MHz.

Set band switch to 21. Everything is the same as above, but diode matrix at counter board tells the chip to display 21.000 as starting frequency.

The butchers that converted the TS830S to 11m just changed the diode matrix to show 27.000 instead of 28.000 as starting frequency (of course, you had to change other parts at the RF board etc, but the changes at the counter board are just to switch the display to another starting frequency). IIRC there is a table at the TS830S SM which ones are needed for this.

To solve your problem: switch the diodes matrix back to the factory circuit. The diodes needed are shown in the SM. You can use 1N4148 or similar to replace missing diodes.

Martin DB2MJ

56348. Re: [TS-520_820_530_830] Questions on diodes on a TS-830s counter unit board

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-05 14:01:03 UTC
From: wagstw46@...
Topic: 56343 Message: 56348

Martin:

The Counter Unit does not see the VCO or VFO signals. It sees two signals generated by the PLL. One is the CON and the other is 1khz clock. The CON is the Counter Input signal.

The CON signal is produced by the PLL by mixing the VFO signal with 1/2 of the 10mhz reference clock. Q29 is the Mixer. The CON signal ranges from 500khz to 1.0mhz.

As you note the band specific information is presented by the diode matrix on the RF board to preset the 10mhz, 1mhz and 100khz digits. If the CON is missing display will read 500khz low.

Perhaps you are referring to the PLL as the "VCO"?

Terry K9TW

56349. Re: [TS-520_820_530_830] Questions on diodes on a TS-830s counter unit board

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-05 14:18:41 UTC
From: Martin Jangowski
Topic: 56343 Message: 56349

Am 05.01.2017 um 15:01 schrieb wagstw46@... [TS-520_820_530_830]:
>
> Perha! ps you are referring to the PLL as the "VCO"?
>
> Terry K9TW

You are correct, I had the details wrong. I refer to the "CON" signal from the PLL (0.5 - 1MHz depending on VFO position). The counter unit adds eg. 6.5MHz to it (depending on band switch position) so the display will show between 7.000 and 7.500 MHz. In reality, the VFO (and the CON signal) has a little more range, so it will show some kHz below the lower band border and a little above it.

Martin DB2MJ

56350. Re: Questions on diodes on a TS-830s counter unit board

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-05 15:27:14 UTC
From: wayne.bowyer@...
Topic: 56343 Message: 56350

When you say SM I guess you're referring to the schematic diagram? I see probably 4 maybe 5 locations where the schematic refers to a diode: for example D102, 103, 104, 105,106 and 110. They are on the print, the location is on the board but it appears like no diode ever existed there. It's easy to see if there ever was a part there and removed due to differences in solder etc. These locations appear to be "virgin" in appearance. Wondering if should just leave these alone or install a diode there?

Wayne
n4eyz

56351. Re: [TS-520_820_530_830] Re: Questions on diodes on a TS-830s counter unit board

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-05 21:38:07 UTC
From: fpath fpath
Topic: 56343 Message: 56351

Hi Wayne,
SM = service manual.
One can only assume you are talking about counter board.
If so download a good copy of the service manual, this also has list of components

I have an early model 830s with factory installed 11 m. All of the counter boards are identical in all of my 830s and 530s radios.

Most cbers tinker with counter board to read 26 and 27 MHz,

,73s
Dave
Vk5pdl
Sent from my HTC

"wayne.bowyer@... [TS-520_820_530_830]" <TS-520_820_530_830@yahoogroups.com> wrote:

When you say SM I guess you're referring to the schematic diagram? I see probably 4 maybe 5 locations where the schematic refers to a diode: for example D102, 103, 104, 105,106 and 110. They are on the print, the location is on the board but it appears like no diode ever existed there. It's easy to see if there ever was a part there and removed due to differences in solder etc. These locations appear to be "virgin" in appearance. Wondering if should just leave these alone or install a diode there?

Wayne
n4eyz

56352. Re: TS-830S No Transmit All Bands

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-05 22:08:05 UTC
From: scottandalene@...
Topic: 56036 Message: 56352

Hi Terry and the Group,

To put some closure on this long series of posts, I now have full 100 watts output from the transmitter. with great help from Terry, done over the telephone the last few days, here is how this problem was solved. My only test instruments are a DMM and homemade germanium diode Rf probe. I also have the blown up schematic from Ken (K4EAA) which was a huge help for my eyes!

To be brief I was getting no Rf to the input of the Balanced Modulator on the IF board. Working back from the BM I was getting Rf from Q13 8.375 MHz oscillator on the IF board and Q41 8.830 Mhz oscillator on the PLL board to Mixer Q16 which meant I was getting 455 KHz Rf. Between Q16 and the BM are two transistors, Q17 and Q18. Q17 is in such a congested area that I couldn't make measurements, but I could on the output of Q18, and in transmit it showing no Rf output and it was getting no DC bias to switch it on. The DC is switched on in transmit by RL1 via Connector 7, Pin 3 on the AF board, but there was no continuity between this source and the route to Q18 which is Connector 4, Pin 1. Terry pointed out to me that there is no direct lead between the two connectors, but they go through a soldered connection on the Mode switch. And that was it-one of the leads was broken off at the mode switch!

Thanks to the Group for patience with my long series of posts and to Terry for his advice and guidance!

Scott, N6CIC

56353. Re: TS-830S No Transmit All Bands

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-05 23:59:14 UTC
From: wagstw46@...
Topic: 56036 Message: 56353

Scott:

Thanks for the closure on this one. I am sure those who were following along appreciate knowing the root cause and how you determined it.

This was a bit of an unusual failure. Not very often that lead wires break off the mode switch solder lugs on the decks.

Most common failures include bad molex connector pin pad soldering, cracked foil trace at the molex pin pad to trace transition area, and bad crimps on the molex connector lead wires.

Enjoy your 3 Mil series TS830S.

73s

Terry K9TW

56354. Re: TS-830S No Transmit All Bands

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-06 12:01:42 UTC
From: wagstw46@...
Topic: 56036 Message: 56354

Scott:

One other thing:

Now that you have restored the TIF signal on IF board you might want to take this opportunity to measure it with your home brew RF probe and DMM and record the value for future use. If you are getting full scale meter deflection when peaking the drive control without need to advance CAR level pot beyond 1200 then you know the level is normal, but would be good to record it using test gear at your disposal.

You know the radio config to do the testing and you know the location of Q29 TIF amp dual gate mosfet so easy testing to perform. I have recorded complete TX Level Diagram for my personal radios.

Looking down at Q29 the Drain is the bottom right lead. If you look at the TX Level Diagram in the Service Manual you can see the level there is nominal 96mv rms rf volts. You can also see that the level at Molex Conn 6 Pin 3 is nominal 12.4mv. You should be able to measure the level at Drain of Q29, but not at Conn 6 (perhaps get an indication of a few mv?).

O-scope or RF millivolt meter is best choice but have to use what you presently have available. As we discussed because you have it at Drain of Q29 doesnt mean you will have it at Conn 6 due to issues with Molex connectors.

Also, might want to go to TP-4 on the RF board and measure the RF drive level at output of the TX Mixer. Should see from 2.0 to 3.0rms rf volts. I would repeat at 3.750, 7.150 and 14.175 to see how the shunt capacitance of your probe affects the readings and the ALC level indication on your panel meter as probe may detune the involved driver stage LC circuits. Always good to know and understand instrument effect on readings.

Have fun.
Terry K9TW

56355. Re: Questions on diodes on a TS-830s counter unit board

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-06 14:17:10 UTC
From: Wayne Bowyer
Topic: 56343 Message: 56355

Thanks for all the help guys. I replaced all the cut and removed diodes. Reinstalled board and all is good. No more 11 meters, all the 10 meter positions are back to normal. Display is working properly. Next step is alignment touch up.

73
Wayne
N4eyz

56356. TS830 functional schematics

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-06 00:37:37 UTC
From: rca6trestore@...
Topic: 56356 Message: 56356

I'm getting ready to do some long delayed repairs. First up is my VOX. Since I am not the sharpest electronic wizard in the room it's useful to me as an exercise to draw a functional schematic of just the system in question. My model for these are the old Tektronix manuals. Where I can clearly see the operation of a system. I just finished this for the 830 VOX and T/R switching. Couple things. Does anyone besides me find this useful? See any mistakes?

The simple program I used (ExpressSCH) only has one format which it can 'share'; bmp. So that's the image.

Thanks for any input.

http://qsl.net/w0mpm/images/Projects/TS830TRswitchandVOX.bmp
http://qsl.net/w0mpm/images/Projects/TS830TRswitchandVOX.bmp

http://qsl.net/w0mpm/images/Projects/TS830TRswitchandVOX.bmp

http://qsl.net/w0mpm/images/Projects/TS830TRswitcha...
http://qsl.net/w0mpm/images/Projects/TS830TRswitchandVOX.bmp

View on qsl.net http://qsl.net/w0mpm/images/Projects/TS830TRswitchandVOX.bmp
Preview by Yahoo

John
W0MPM

56357. Re: TS830 functional schematics

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-06 20:47:21 UTC
From: Mark Gilger
Topic: 56356 Message: 56357

John,
I had to look up your name on QRZ because you forgot to sign your posting.

Yes, these types of drawings are great, as I think most would agree.
Simplifies the trouble shooting considerably as the larger 830
schematic is sometimes very intimidating. It's easy to get lost
following it from one end of the chart to the other.

Mark, WB0IQK

56358. Re: TS830 functional schematics

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-06 21:06:04 UTC
From: rca6trestore@...
Topic: 56356 Message: 56358

Hi Mark.

Ummm. I signed with 2 lines name over call. But it is below the link (I didn't expect Yahoo to insert a preview below the link address).

If the idea has merit I will try to do a description. Again think Tek or HP manual. That is sure to be only partially accurate so I'll need lots of guidance.

I did not put any of the voltages from the Kenwood schematic on because there are several that at least in detail must be wrong. (ex: Q12 collector and Q15 base are common but there is a 1V difference when they HAVE to be the same. Petty but hey ...) Need to check them out in a real radio.

Gotta fix my VOX. It's functional (turns on) in CW. But in SSB mode the moment S14/VOX is 'ON' the radio keys. Also although CW mode VOX does key the delay has no effect all all.

John, W0MPM

56359. Re: [TS-520_820_530_830] TS830 functional schematics

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-06 23:04:04 UTC
From: Martin Jangowski
Topic: 56356 Message: 56359

Am 06.01.2017 um 01:37 schrieb rca6trestore@... [TS-520_820_530_830]:
>
> I'm getting ready to do some long delayed repairs. First up is my VOX.
> Since I am not the sharpest electronic wizard in the room it's useful
> to me as an exercise to draw a functional schematic of just the system
> in question. My model for these are the old Tektronix manuals. Where I
> can clearly see the operation of a system. I just finished this for
> the 830 VOX and T/R switching. Couple things. Does anyone besides me
> find this useful? See any mistakes?
>

Great idea! I had to fight with the VOX circuit myself (didn't work at
all, took me some time to find out that my Shure mic had a shortcut
switch when the PTT key wasn't pressed...).

Martin DB2MJ

56360. Re: TS-830S No Transmit All Bands

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-07 00:00:01 UTC
From: scottandalene@...
Topic: 56036 Message: 56360

Good idea Terry. My radio is still open as I plan to install a CW filter on the IF board. I will take some baseline readings and record them for future reference. FYI-I also plan to order a replacement FL-1 from Ken just in case mine fails.

Thanks again for your help.

Scott, N6CIC

56361. Re: [TS-520_820_530_830] Re: TS830 functional schematics

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-06 22:00:11 UTC
From: Mark Gilger
Topic: 56356 Message: 56361

John,
On what was sent out to the group, there is
nothing showing at the very end of the
posting. I'll send you an email direct with a paste of what I'm seeing.

Mark

At 04:06 PM 1/6/2017, you wrote:
>
>
>Hi Mark.
>
>Ummm. I signed with 2 lines name over call. But
>it is below the link (I didn't expect Yahoo to
>insert a preview below the link address).
>
>If the idea has merit I will try to do a
>description. Again think Tek or HP manual. That
>is sure to be only partially accurate so I'll need lots of guidance.
>
>I did not put any of the voltages from the
>Kenwood schematic on because there are several
>that at least in detail must be wrong. (ex: Q12
>collector and Q15 base are common but there is a
>1V difference when they HAVE to be the same.
>Petty but hey ...) Need to check them out in a real radio.
>
>Gotta fix my VOX. It's functional (turns on) in
>CW. But in SSB mode the moment S14/VOX is 'ON'
>the radio keys. Also although CW mode VOX does
>key the delay has no effect all all.
>
>John, W0MPM
>

56362. Re: TS-520 tuning problem

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-07 04:43:12 UTC
From: oceanmariner@...
Topic: 56298 Message: 56362

Sorry about my slow reply. Had to hunt hi and low to find the 82 and 47pf caps. I replaced them and it now tunes OK on all bands with full output. Many thanks Terry for your advice..

73s
Jack ZL1KFS

56363. Re: [TS-520_820_530_830] Re: TS830 functional schematics

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-07 04:47:10 UTC
From: Joseph Stiles
Topic: 56356 Message: 56363

John's name and call do appear below the well done schematic...at least on my screen.
73
Joe wb7uqu

On Friday, January 6, 2017 6:23 PM, "Mark Gilger mgilger@... [TS-520_820_530_830]" <TS-520_820_530_830@yahoogroups.com> wrote:

John,
On what was sent out to the group, there is nothing showing at the veryend of the posting. I'll send you an email direct with a paste ofwhat I'm seeing.

Mark

At 04:06 PM 1/6/2017, you wrote:

Hi Mark.

Ummm. I signed with 2 lines name over call. But it is below the link (Ididn't expect Yahoo to insert a preview below the link address).

If the idea has merit I will try to do a description. Again think Tek orHP manual. That is sure to be only partially accurate so I'll need lotsof guidance.

I did not put any of the voltages from the Kenwood schematic on becausethere are several that at least in detail must be wrong. (ex: Q12collector and Q15 base are common but there is a 1V difference when theyHAVE to be the same. Petty but hey ...) Need to check them out in a realradio.

Gotta fix my VOX. It's functional (turns on) in CW. But in SSB mode themoment S14/VOX is 'ON' the radio keys. Also although CW mode VOX does keythe delay has no effect all all.

John, W0MPM

56364. Re: TS-520 tuning problem

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-07 12:05:03 UTC
From: wagstw46@...
Topic: 56298 Message: 56364

Jack:

Very common for tank circuit fixed padder caps to have deteriorated on these old Hybrids. See more and more of this as they age. The dielectric sees RF current service.

Hopefully you were able to find some Temp Coefficient Class 1 caps (NPO or COG) designed for RF current service or Silver Micas. If you used Class 2 type disc ceramics like Z5U's need to use high voltage like 3kv wvdc rated to keep them in service. If not, may go off like a fire cracker.

Terry K9TW

56365. Want to buy a DS-2 or DS-1a Converter

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-07 16:25:45 UTC
From: kg6axx@...
Topic: 56365 Message: 56365

I have a TS 520S that works great on commercial power but am looking to run off grid. Anybody know where I can get a converter? No luck on ebay or QRZ forum.

73's
Gary KG6AXX

56367. Link

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-07 20:41:45 UTC
From: Victor
Topic: 56367 Message: 56367

Hi, friends. Maybe, it will be interesting.
http://ra3wdk.qrz.ru/TS830.htm#two_filters
--
73/72 - Victor, UA1CEX, KO49tl.

56368. TS830S Sick

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-07 21:38:16 UTC
From: stevewiddett@...
Topic: 56368 Message: 56368

Hi Group,

I recently purchased aTS830S in"great working condition"☐

Powers up, HV and Bias current OK on meter.

Audio through speaker responding to AF control, but no RF noise or receive signals.

No transmit, and no ALC movement with full Mic gain.

Only last digit of display dimly lit, and not responding to spinning of tuning knob.

Any suggestions where to start?

Thanks in advance.

73

Steve
Sent from my iPad

56369. RE: [TS-520_820_530_830] TS830S Sick

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-07 21:59:51 UTC
From: Joe
Topic: 56368 Message: 56369

Does the TS-830 have the External VFO plug, like the TS-820? And if yes, does it shunt power back into the radio as does the 820? If yes, then check to see if the External VFO plug is missing. If yes to the previous questions, and it6 IS missing, there is your problem.

Joe – W7RKN

From: TS-520_820_530_830@yahoogroups.com [mailto:TS-520_820_530_830@yahoogroups.com]
Subject: [TS-520_820_530_830] TS830S Sick

Hi Group,

I recently purchased aTS830S in"great working condition"☐

Powers up, HV and Bias current OK on meter.

Audio through speaker responding to AF control, but no RF noise or receive signals.

No transmit, and no ALC movement with full Mic gain.

Only last digit of display dimly lit, and not responding to spinning of tuning knob.

Any suggestions where to start?

Thanks in advance.

56370. Re: [TS-520_820_530_830] TS830S Sick

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-07 22:22:52 UTC
From: Martin Jangowski
Topic: 56368 Message: 56370

Am 07.01.2017 um 22:59 schrieb Joe w7rkn.7@... [TS-520_820_530_830]:
>
> Does the TS-830 have the External VFO plug, like the TS-820? And if
> yes, does it shunt power back into the radio as does the 820? If yes,
> then check to see if the External VFO plug is missing. If yes to the
> previous questions, and it6 IS missing, there is your problem.
>

No plug for the TS-830, but a switch at the socket. If this doesn't
work, it's about the same as the missing plug at the 820. Clean it with
a contact cleaner.

Martin DB2MJ

56371. Re: [TS-520_820_530_830] TS830S Sick

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-07 22:17:58 UTC
From: stevewiddett@...
Topic: 56368 Message: 56371

Hi Joe,

No it does not have that issue like the 520 and the 820.

Thanks

Steve

W8SAW

Sent from my iPad

> On Jan 7, 2017, at 16:59, Joe w7rkn.7@... [TS-520_820_530_830] <TS-520_820_530_830@yahoogroups.com> wrote:
>

> Does the TS-830 have the External VFO plug, like the TS-820? And if yes, does it shunt power back into the radio as does the 820? If yes, then check to see if the External VFO plug is missing. If yes to the previous questions, and it6 IS missing, there is your problem.
>
>
>
> Joe – W7RKN
>
>
>
> From: TS-520_820_530_830@yahoogroups.com [mailto:TS-520_820_530_830@yahoogroups.com]
> Subject: [TS-520_820_530_830] TS830S Sick
>
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>
>
> Hi Group,
>
> I recently purchased aTS830S in"great working condition"☐
>
> Powers up, HV and Bias current OK on meter.
>
> Audio through speaker responding to AF control, but no RF noise or receive signals.
>
> No transmit, and no ALC movement with full Mic gain.

>
> Only last digit of display dimly lit, and not responding to spinning of tuning knob.
>
> Any suggestions where to start?
>
> Thanks in advance.
>
>
>
>
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>
>
>

56372. Re: [TS-520_820_530_830] TS830S Sick

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-07 22:32:48 UTC
From: stevewiddett@...
Topic: 56368 Message: 56372

Hi Martin,
I don't see any switch. Which socket are you referring to?
73
Steve
W8SAW

Sent from my iPad

> On Jan 7, 2017, at 17:22, Martin Jangowski martin@... [TS-520_820_530_830] <TS-520_820_530_830@yahoogroups.com> wrote:
>
>> Am 07.01.2017 um 22:59 schrieb Joe w7rkn.7@... [TS-520_820_530_830]:
>>
>> Does the TS-830 have the External VFO plug, like the TS-820? And if yes, does it shunt power back into the radio as does the 820? If yes, then check to see if the External VFO plug is missing. If yes to the previous questions, and it6 IS missing, there is your problem.
>>
>
> No plug for the TS-830, but a switch at the socket. If this doesn't work, it's about the same as the missing plug at the 820. Clean it with a contact cleaner.
>
> Martin DB2MJ
>

56373. Re: [TS-520_820_530_830] TS830S Sick

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-07 23:35:26 UTC
From: Martin Jangowski
Topic: 56368 Message: 56373

Am 07.01.2017 um 23:32 schrieb stevewiddett@... [TS-520_820_530_830]:
> Hi Martin,
> I don't see any switch. Which socket are you referring to?
> 73
> Steve
> W8SAW

Its S21 at the ext. VFO connector. It switches when a plug is inserted into this connector. This switch replaces the shortcut plug of the earlier models.

Martin DB2MJ (watching Texans vs. Raiders, we can view all playoff games in DL :-)

56374. Re: [TS-520_820_530_830] TS830S Sick

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-08 01:30:05 UTC
From: <johnsonguysharon@...>
Topic: 56368 Message: 56374

Jumper pins 8 & 9 on back of unit. Sounds like you are missingthe remote VFO plug. GUY/N4DELhttp://westvars.org/

On Saturday, January 7, 2017 6:35 PM, "Martin Jangowski martin@... [TS-520_820_530_830]" <TS-520_820_530_830@yahoogroups.com> wrote:

> Am 07.01.2017 um 23:32 schrieb stevewiddett@... [TS-520_820_530_830]:
>
> Hi Martin, I don't see any switch. Which socket are you referring to? 73 Steve W8SAW

Its S21 at the ext. VFO connector. It switches when a plug is inserted into this connector. This switch replaces the shortcut plug of the earlier models.

Martin DB2MJ (watching Texans vs. Raiders, we can view all playoff games in DL :-)

56375. Re: [TS-520_820_530_830] TS830S Sick

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-08 02:10:15 UTC
From: stevewiddett@...
Topic: 56368 Message: 56375

Hi Martin,

OK I have checked S21 and it is functioning fine. The VFO LED is on and I have 9v going through S21 when the DIN Plug is out.

Any other thoughts?

Regards

Steve
W8SAW fka DL5SW

Sent from my iPad

> On Jan 7, 2017, at 18:35, Martin Jangowski martin@... [TS-520_820_530_830] <TS-520_820_530_830@yahoogroups.com> wrote:
>
>> Am 07.01.2017 um 23:32 schrieb stevewiddett@... [TS-520_820_530_830]:
>>
>> Hi Martin,
>> I don't see any switch. Which socket are you referring to?
>> 73
>> Steve
>> W8SAW
>
> Its S21 at the ext. VFO connector. It switches when a plug is inserted into this connector. This switch replaces the shortcut plug of the earlier models.
>
> Martin DB2MJ (watching Texans vs. Raiders, we can view all playoff games in DL :-)
>

56376. 820V

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-08 16:33:30 UTC
From: Victor
Topic: 56376 Message: 56376

Hi, friends. Is somebody has schematic of qrp versiion TS-820V?
--
73/72 - Victor, UA1CEX, KO49tl.

56378. Re: TS 530S Dip in wrong part of plate dial?

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-08 07:40:04 UTC
From: remingtonhill1@...
Topic: 56295 Message: 56378

Joe wb7uqu,

My God you're right! I didn't notice that! Thanks for the help.

Thanks,

73
Shane
KG5RJS

56379. Re: [TS-520_820_530_830] Re: TS 530S Dip in wrong part of plate dial?

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-08 17:13:04 UTC
From: Joseph Stiles
Topic: 56295 Message: 56379

Shane,
u r welcome
 73
Joe wb7uqu

On Sunday, January 8, 2017 9:11 AM, "remingtonhill1@... [TS-520_820_530_830]" <TS-520_820_530_830@yahoogroups.com> wrote:

  Joe wb7uqu,
My God you're right! I didn't notice that! Thanks for the help.

Thanks,
73ShaneKG5RJS

56380. TS-520S - broken Coil T13 IF Unit

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-08 20:22:12 UTC
From: webgoofy@...
Topic: 56380 Message: 56380

Hello Group;
This is my first post regarding my TS-520S, which I recently bought defective.
When I opened the TS-520S the first time for an inspection, I immediately noticed a defective coil. T13 on the IF Unit (X48-1060-01) is defective. The core is defective, the coil is also missing and the hood is missing.
Can someone tell me what I can use as a replacement?

Many thanks in advance.
73 DH5GP
Gregor

56381. Re: TS-520S - broken Coil T13 IF Unit

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-08 21:44:43 UTC
From: n4jhy@...
Topic: 56380 Message: 56381

Gregor,

Sorry to hear about your situation with your TS520s.

I see these boards for sale on ebay pretty often.

Best luck to you. The 520 is a fun radio.

73, Bruce N4JHY

56382. TS-830S Digital Display Glitch

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-08 22:23:25 UTC
From: scottandalene@...
Topic: 56382 Message: 56382

I had just lifted the IF Board to install a CW filter, and after re-installing the board and turning the radio on, the digital display became very erratic. Turning the VFO changed the readings, but numbers were transposed, especially all 1 digits became 7 digits. I had to remove several Molex connectors on the IF board to install the filter-and I thought-"Oh oh I have done it now!"

After review of the files for this group I noted one possible cause of erratic display problems is a dirty or corroded "FIX" switch, which in the OFF position is a conduit for 9 volts from the AF-AVR supply to the Counter board. Upon repeatedly exercising the FIX switch, the erratic display was corrected. Many thanks to this forum as a source of invaluable information!

Scott, N6CIC

56383. Re: [TS-520_820_530_830] TS-520S - broken Coil T13 IF Unit

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-08 22:24:02 UTC
From: Lou Blasco
Topic: 56380 Message: 56383

Hi Gregor,

Walter Dilley stock replacement parts for Kenwood hybrids (TS-520,
TS-820, TS-530, and TS-830

You can find him here

walter dot dilley at gmail dot com

Regards

Lou
VK3ALB

At 07:22 09/01/2017, webgoofy@... [TS-520_820_530_830] wrote:
>
>
>Hello Group;
>
>This is my first post regarding my TS-520S, which I recently bought defective.
>
>When I opened the TS-520S the first time for an inspection, I
>immediately noticed a defective coil. T13 on the IF Unit
>(X48-1060-01) is defective. The core is defective, the coil is also
>missing and the hood is missing.
>
>Can someone tell me what I can use as a replacement?
>
>Many thanks in advance.
>
>73 DH5GP
>
>Gregor

56384. KENWOOD HYBRID NET UPDATE (Jan 8, 2017)

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-08 20:09:41 UTC
From: Mark Gilger
Topic: 56384 Message: 56384

Net Info:
Saturday: 7.235 @ 3:30pm Eastern following the Swan Tech Net
Sunday: 14.316 @ 1800 UTC following the ICOM net

Web Site:
<http://www.wb4hfn.com/KENWOOD/KenwoodHomePage.htm>http://www.wb4hfn.com/KENWOOD/KenwoodHomePage.htm

The net started its existence on November 1st,
2011. The yearly check-in totals are posted at the bottom of this message.

The Saturday net was run by me, WB0IQK. There
were 13 stations checking in under POOR band conditions.

We had the following number of radios checking in.
3 running TS-520(x)
3 running TS-530(x)
2 running TS-820(x)
4 running TS-830S
0 running TS-510
0 running TS-511
0 running TS-515
0 running 599 twins
0 running TS-900

I was running my TS-830S + Drake L-4B amplifier.

The Sunday net was run by me, WB0IQK. There were
37 stations checking in under POOR band conditions.

We had the following number of radios checking in.
3 running TS-520(x)
2 running TS-530(x)
3 running TS-820(x)
9 running TS-830S
0 running TS-510
0 running TS-511
0 running TS-515
0 running 599 twins
0 running TS-900

I was running my TS-830S + Drake L-4B amplifier.

We have been having several people checking in
regularly with their TS-430, TS-440, and
TS-940□s, which of course is not a hybrid,
although over 30+ years old. Everyone is welcome

as long as they have an interest in the older equipment.

If anyone would be interested in filling in as a
net control station, please send me an email.
Currently it's just myself, Jimmy, WB2KNR, and
Greg, WQ0P . I would like to get several more. If
we do, we can alternate so everyone might be on a
3-4 week rotation. It's a lot of fun and a good
way to make sure you station is optimized.

For anyone that has not heard, we have a new web
site that WB4HFN is hosting. He currently has a
very nice site for Drake, Collins and Heathkit
and now Kenwood Hybrids. Good quality manuals
plus sale flyers and brochures will be found
here, along with user supplied information for all Hybrids.

His URL is:
<http://www.wb4hfn.com/KENWOOD/KenwoodHomePage.htm>http://www.wb4hfn.com/KENWOOD/KenwoodHo
mePage.htm

To date, we have had the following check-in:

Nov. 2011 ☐ Oct. 2012 Saturday total 754
check-ins, Sunday total 563 check-ins
Nov. 2012 - Oct. 2013 Saturdays total 828 check-ins, Sunday total 609 check-ins
Nov. 2013 - Oct. 2014 Saturdays total 842 check-ins, Sunday total 744 check-ins
Nov. 2014 ☐ Oct 2015 Saturdays total 962 check-ins, Sunday total 669 check-ins
Nov. 2015 ☐ Oct 2016 Saturdays total 807 check-ins, Sunday total 628 check-ins

November 2016, Saturday net total = 80, Sunday total = 68
December 2016, Saturday net total = 73, Sunday total = 69
January 2017, Saturday net total = 13, Sunday total = 38 (Month to date)

Net Info:
Saturday: 7.235 @ 3:30 Eastern following the Swan Tech Net
Sunday: 14.316 @ 1800 UTC following the ICOM net

Web Site:
<http://www.wb4hfn.com/KENWOOD/KenwoodHomePage.htm>http://www.wb4hfn.com/KENWOOD/KenwoodHo
mePage.htm

73's,
Mark, WB0IQK

56385. Re: TS-520S - broken Coil T13 IF Unit

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-09 00:39:59 UTC
From: wagstw46@...
Topic: 56380 Message: 56385

Gregor:

If you cant find a T13 replacement choke I wouldnt be too worried about it. It is part of series resonant suck out trap for the 80 meter 12.395 het oscillator. All the TS520 series radios and the predecessor series have a pretty strong birdie at 3.736 mhz. T13 is adjusted to reduce the level of this birdie at that spot on the VFO.

It may not be worth disturbing the wiring harness and any of the IF board wire wrap terminal post or breaking off any of the mini-coax solder connections to unsolder and replace T13.

Tune to 3.736mhz and see how objectional this birdie is with an antenna connected to the rig.

Terry K9TW

56386. Re: [TS-520_820_530_830] Re: TS-520S - broken Coil T13 IF Unit

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-09 03:15:37 UTC
From: I.E.G.
Topic: 56380 Message: 56386

Well if you must ...

http://www.ebay.co.uk/itm/Kenwood-TS-520-IF-x48-1060-00-with-standard-SSB-filter/251864357233?_trksid=p2047675.c100011.m1850&_trkparms=aid%3D222007%26algo%3DSIC.MBE%26ao%3D1%26asc%3D40760%26meid%3D0457d90b6c5c4ba79774d54e90e0f538%26pid%3D100011%26rk%3D2%26rkt%3D9%26sd%3D322292936489

then again it looks like a TOKO/MuRata 10k , or close . looking through my junk pile I find several options . Virtually "any" 11m radio of the SSB 02a/Mc145106 variety will have a 10 to 20mhz doubler off the PLL . With the 5pf for adjustment and using just the primary you should be able to get close to a notch . If not I'm sure I have some coil/turns/Uh/slug material data from the dark ages

AF7XT Dennis

On Sun, Jan 8, 2017 at 4:39 PM, wagstw46@... [TS-520_820_530_830] <TS-520_820_530_830@yahoogroups.com> wrote:

>
>
> Gregor:
>
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> it. It is part of series resonant suck out trap for the 80 meter 12.395 het
> oscillator. All the TS520 series radios and the predecessor series have a
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> connections to unsolder and replace T13.
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> connected to the rig.
>
> Terry K9TW
>
>
>

--
one of these days I will have an internet connection faster than my computer

56387. Kenwood TS820 VFO. Lesson learned!?!!

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-10 18:08:11 UTC
From: n4jhy@...
Topic: 56387 Message: 56387

Back in the beginning of December I bought a nice condition TS820s from a local, for a very good price, that had some issues.

A total re-solder of both boards in the DG-1 got the digital display working again.

With the great correct instructions from Terry, the speech processor is now aligned, and sounding great.

The last concern was the VFO. For some reason the Khz wheel would slip in several places tuning from 000-499. A minor take apart, inspection, and a lubing with the radio face up would not take care of the slippage.

A ham listed on QTH.com that he was parting out a TS820 and I bought the VFO from him.

It seems that Kenwood had an early digital display tube (all wiring going to one side of the display tube) and a later version (with wiring going to both sides of the display tube).

Mine is the later version, wiring both sides.

I started this morning swapping out the two VFO's.

The new VFO itself went into my 820 just fine, but I could not get the display tube ass'y to fit into place. I was so very careful as I know those display tubes are fragile, and impossible to find.

In final desperation I removed the new VFO and sat it on my bench, next to the original VFO I had first taken out.

There is a little "L" bracket mounted to these VFOs that holds the dial illuminating light in place, and holy smoke, they are different from one VFO to the other.

I swapped these two brackets between the two VFOs and now the new VFO went in just fine, along with the digital display tube ass'y.

In summery, it looks like when Kenwood went from the early display tube to the newer display, they changed the design of the lamp bracket, to make room for the newer display tube.

Live and learn. UGH!!!

All is wonderful now with the new VFO in my 820s.

I really like this 820. The receiver has such a great sound, and I believe the 820, compared with the 520, 530, and 830, is the winner in design of construction. The 820 is a dream to work on.

73, Bruce N4JHY
Thanks Terry and all!!!!!!!!!!!!!!!!!!!!

56388. Re: [TS-520_820_530_830] Kenwood TS820 VFO. Lesson learned!?!!

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-10 23:42:26 UTC
From: Joseph Stiles
Topic: 56387 Message: 56388

Bruce,
  You now know the joy, and frustration(!!!), involved with owning and operating these vintage Kenwood hybrids! I still have, and operate, my TS-820S that I bought from the yearly ham fest..(from and SK estate back in 1981)...owning that rig, and currently several other KW hybrids, has taught me more about diagnostics and electronics than just being a modern day "operator." Another big plus is not only being the co-owner of this group...but learning from Terry-k9tw, Mike-w5rkl...and others, who are frequent contributors to questions. Their efforts and contributions are greatly appreciated!

Thanks for updating us on your efforts. Many will ask for help, but will not post follow-ups..for what ever reason. Posting your problem, along with follow up testing/repair results, go a long way in assisting current and future group members in keeping these fine old rigs up and running.....
I hope you enjoy your time with us.....
 73
Joe wb7uqugroup co-owner

On Tuesday, January 10, 2017 10:08 AM, "n4jhy@... [TS-520_820_530_830]" <TS-520_820_530_830@yahoogroups.com> wrote:

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73, Bruce N4JHYThanks Terry and all!!!!!!!!!!!!!!!!!!!!

56389. Re: [TS-520_820_530_830] Kenwood TS820 VFO. Lesson learned!?!!

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-11 00:52:15 UTC
From: George Bower
Topic: 56387 Message: 56389

Terry, What kind of issues were you having that made you do the solder thing? I m wondering i I have the same thing with my ts30s.
Thanks so much.

73
George

On Jan 10, 2017, at 1:08 PM, n4jhy@... [TS-520_820_530_830]
<TS-520_820_530_830@yahoogroups.com> wrote:

Back in the beginning of December I bought a nice condition TS820s from a local, for a very good price, that had some issues.

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73, Bruce N4JHY

Thanks Terry and all!!!!!!!!!!!!!!!!!!!!

56390. Re: [TS-520_820_530_830] Kenwood TS820 VFO. Lesson learned!?!!

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-11 11:41:49 UTC
From: n4jhy@...
Topic: 56387 Message: 56390

George,

I think your question about the counter re-soldering in my TS-820s may have been to me, Bruce N4JHY.

The ts820s are notorious for counter problems.

In final desperation I did a re-solder of both boards in its DG-1 counter unit, and got lucky to now have it working.

As far as your 830 counter situation, I am not the one with any experience with the 830 counter to comment.

Best luck to you,

Bruce N4JHY 73

56391. Quesion on TS-830s alignment

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-11 14:09:28 UTC
From: wayne.bowyer@...
Topic: 56391 Message: 56391

I just finished repairing some issues with an 830 as well as reversing some CB mods. I'm in the midst of checking/touching up alignment. Using the owners manual procedure of adjustment of the antenna and mixer coils (coil pack), it seems adjustment of the antenna coil makes little to no difference in signal level (cal signal level). Mixer coil is what I expected. Is this normal? My last receiver alignment was an HW-101 so that's my basis for comparison.

Thanks
Wayne
n4eyz

56392. Las Vegas Ham Convention

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-11 17:50:49 UTC
From: gdesler@...
Topic: 56392 Message: 56392

The second annual ARRL sponsored Amateur Radio Convention will be held March 31st through April 2nd.
We are looking for speakers to join an already impressive list. Please contact me if interested in speaking

(Gary Desler AA7YO gdesler@me dot com)

. For those who wish to come you can register at
Nevada State Convention http://nvcon.org/

Nevada State Convention http://nvcon.org/ Saturday Banquet Our banquet buffet returns this year with some great entertainment and prizes. A must attend event for those attending the convention.

View on nvcon.org http://nvcon.org/
Preview by Yahoo

56393. TS-830S QRP via ALC

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-11 16:14:54 UTC
From: unnorml@...
Topic: 56393 Message: 56393

Hello All,
I am trying to use the ALC input on my TS-830S to reduce the output power for QRP operation. I'm using the commonly discussed method of a potentiometer and a 9V battery for the negative input. I've built a nice little circuit and have successfully used it on my TS-520S. I have checked all the connections and the ALC input works fine when used with my AL-811 amplifier. I just can't seem to get any change in the output with this on the 830. Anyone have any ideas what might be the issue?

Thanks and 73,

Mike (KI4FDH)

56394. TS-820S 10m ALC and Tx power question

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-12 23:10:49 UTC
From: testtech@...
Topic: 56394 Message: 56394

I am going through a newly acquired TS-820S, and have a question about typical 10m ALC and transmit power.
This rig was lovingly owned by the original ham, and is in very good condition. I have gone through it and replaced a few out of tolerance carbon comp resistors, done the RF alignment, replaced the tubes, even thought the originals seem fine, and it works quite well I think, with good sensitivity, and Tx output about 100W on all bands except 10m and up, where I can get about 75W.
However, on "28" and up, there is no ALC indication during tune-up, even after adjusting the CAR2 board to match the CW filter. This is with the CAR control fully CW. The other bands can have the CAR control about 12:00.
Is this typical?

Thanks for any help!
73,
Bob
KG7EMO

56395. Re: TS-820S 10m ALC and Tx power question

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-12 23:42:40 UTC
From: wagstw46@...
Topic: 56394 Message: 56395

Not typical.

How did you adjust TC-1 to bring the CA-2 oscillator to the CW filter?

Also, what is the CA-2 level at TP-5? The noted 50mv level in the Service Manual is wrong. Carrier Oscillator levels should be set to 300mv rms.

Terry K9TW

56396. Re: [TS-520_820_530_830] TS-820S 10m ALC and Tx power question

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-13 00:45:22 UTC
From: John Davidson
Topic: 56394 Message: 56396

Sounds like my TS520, new out of the box, on 10M I had to tune for plate current with the drive tuning with the Car turned way up on CW. The ALC reading on 10M was pretty low . I thought the 820 and 520 S models were better on 10M but never really saw one getting tuned up. I worked all over the world on 10M with the 520 when I put up my HyGain 103 Yagi ! My radio is Ham Radio...CW is Real Radio 73, John...K8JD

From: "testtech@... [TS-520_820_530_830]" <TS-520_820_530_830@yahoogroups.com>
To: TS-520_820_530_830@yahoogroups.com
Sent: Thursday, January 12, 2017 6:10 PM
Subject: [TS-520_820_530_830] TS-820S 10m ALC and Tx power question

  I am going through a newly acquired TS-820S, and have a question about typical 10m ALC and transmit power.
This rig was lovingly owned by the original ham, and is in very good condition. I have gone through it and replaced a few out of tolerance carbon comp resistors, done the RF alignment, replaced the tubes, even thought the originals seem fine, and it works quite well I think, with good sensitivity, and Tx output about 100W on all bands except 10m and up, where I can get about 75W.
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Is this typical?

Thanks for any help!
73,
Bob
KG7EMO

56397. Re: [TS-520_820_530_830] TS-820S 10m ALC and Tx power question

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-13 11:01:25 UTC
From: wagstw46@...
Topic: 56394 Message: 56397

You should have returned it to the dealer.

Never had any 520 series rig on the bench that didnt leave with decent ALC indication on 10 meters. Wont be able to get FSD indication, but wont need to run CAR Level pot full CW and will typically attain mid scale or better deflection in Tune mode when peaking the Drive.

Ask one simple question.....If one or more TS520 series rigs have good ALC indication when loading the radio on 10 meters why cant all of them? The "myth" that this is normal or by design is just that a myth.

To live with this and call it normal is like buying a factory new 72 Ford Falcon that the speed-o-meter reads in all gears but 4th and having to use a work around like timing mile marker posts to figure out how fast you are going and thinking that is by design.

Terry K9TW

56398. Selling my TS-530S

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-13 16:10:41 UTC
From: jstoneback@...
Topic: 56398 Message: 56398

Greetings!

I just purchased a TS-530sp and am selling my TS-530s. It's in great condition and works perfectly. Equipped with standard SSB filter. I replaced the original RL-1 relay with K4EAA board with plug-in relays; also installed his final resistor kit; and replaced the screen voltage grid switch - good to go for another million miles. Full output on all bands, excellent receiver performance.

Front panel is very good, cabinet has a few scratches. See pix on my QRZ page. Will list on QRZ.com in a day or two with full set of pix. Looking to get $450 shipped CONUS.

73,

Jim K4AXF
TS-530sp
TS-520
R-5000

56399. Re: TS-820S 10m ALC and Tx power question

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-13 16:57:42 UTC
From: Bob Koller
Topic: 56394 Message: 56399

Terry,Thank you for assistance!I peaked the CAR2 osc with TC1 for maximum through the CW filter, and touched up the CAR2 T1 for 300mv rms at TP5. There is 300mv at TP5 on all bands, in TUN and CW Tx.
Also, I am confused as to where to connect the FSK jumper, and the IF2 connector. I won't be doing FSK.

Still no ALC on 28 and up. I think this may be a problem in PA? I replaced the final coupling and bypass caps, but this didn't do much if anything.I removed, cleaned, and carefully soldered the bandswitch wafer contacts to the pcb traces, and replaced the plastic coupler. I believe the bandswitch coupler is properly aligned.
Thanks again,
Bob

56400. Re: [TS-520_820_530_830] Re: TS-820S 10m ALC and Tx power question

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-13 19:30:55 UTC
From: Louis Wilen
Topic: 56394 Message: 56400

For what it's worth, I have found that on my TS-530S, a weak drive tube (12BY7A) also gives little or no ALC on 28 and up, even with the CAR control at maximum. Installing a good drive tube resolves the problem, giving ALC again on all bands, although never as much ALC on 10M as on the other bands. But that is to be expected.

Louis W3VVV

On 1/13/2017 11:57 AM, Bob Koller testtech@...
[TS-520_820_530_830] wrote:
> Terry,
> Thank you for assistance!
> I peaked the CAR2 osc with TC1 for maximum through the CW filter, and
> touched up the CAR2 T1 for 300mv rms at TP5. There is 300mv at TP5 on
> all bands, in TUN and CW Tx.
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> contacts to the pcb traces, and replaced the plastic coupler. I
> believe the bandswitch coupler is properly aligned.
>
> Thanks again,
>
> Bob
>
>

56401. Re: TS-820S 10m ALC and Tx power question

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-13 21:13:53 UTC
From: wagstw46@...
Topic: 56394 Message: 56401

Can you measure the RF drive level at Control grids of the Finals?

Need O-scope or RF Millivolt meter or VTVM with 3 diode probe.

Need RF drive level on positive going peak of the envelope to exceed the DC offset established by the operating bias to make control grids positive with respect to the cathode and have ua grid current flow. That ua grid current will result in negative voltage at collector of the ALC amp transistor that will buck the RF-1 level and cause the ALC buss voltage supplied to the TIF amp to go down. The ALC meter circuit is FET based with gate of FET hanging on the buss. This makes it a reverse reading voltmeter. When the buss voltage goes down the ALC indication will go up

That means for example if the bias voltage is set to -55vdc you will need greater than 39rms rf volts to see any ALC indication (39 x 1.414= 55.15) Less than that you will have sufficient RF drive for RF output from the PA, but no ALC indication to peak in Tune mode.

Try adjusting TC-1 as you monitor the RF drive at Control grids of Final tubes at tube socket on Final board. If you tuned TC-1 for maximum Rf voltage at output of CW filter then probably good as that should have addressed any shift in filter Fc, but might be worth adjusting as you monitor RF drive level at control grids.

Can also try peaking the 28 mhz Mixer coil L7 as you monitor the RF drive at Final tube control grids. You would do that with the BS on 28 and VFO on 500 and Drive control at 1200. Not proper way to do Coil Pack alignment as can give up some receiver sensitivity, but worth a try. I have procedure on my website on how to adjust the Drive Coils to align with the Mixer coils.

Go to your owners manual and look at the positions of the IF2 plug shown in Fig 25. You can place it in either B or C position if not going to work FSK.

Terry K9TW

56402. Re: TS-820S 10m ALC and Tx power question

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-13 21:33:06 UTC
From: wagstw46@...
Topic: 56394 Message: 56402

The reason I asked how you had brought the CW TX carrier oscillator to the CW filter is that many folks adjust TC-1 trimmer cap to set the oscillator spot on at 8830.700. In my experience you cannot do that. Many of the optional TS820S CW filters I see Fc has shifted to the 8830.200 to 8830.400 range.

Same with any of the KW hybrid models carrier oscillator adjustments. Silly to spend lots of time setting the LSB and USB carrier oscillators spot on the crystal frequencies. Those are just starting points. You cant depend on the old filters Fc to be precisely per nameplate. Since you cant do anything about the filter response always need to bring the carrier oscillators to the filters. With the LSB and USB filters best method is audio injection into mic line and wattmeter method to adjust the 6dB roll off. I typically do that at 300hz on the low end. True there is a bit of personal preference as to liking a bass sound or a more treble communications presence.

Terry K9TW

---In TS-520_820_530_830@yahoogroups.com, <wagstw46@...> wrote :

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Terry K9TW

56403. Re: [TS-520_820_530_830] Carrier osc adjustment

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-13 22:13:51 UTC
From: Lou Blasco
Topic: 56394 Message: 56403

Hi Terry,

It might interest some members to learn exactly what you do when you adjust the carrier oscillators in this way.

A summary can be found in message number 46822 from 04 Jan 2014

Regards

Lou
VK3ALB

At 08:33 14/01/2017, you wrote:
>
>
>The reason I asked how you had brought the CW TX carrier oscillator
>to the CW filter is that many folks adjust TC-1 trimmer cap to set
>the oscillator spot on at 8830.700. In my experience you cannot do
>that. Many of the optional TS820S CW filters I see Fc has shifted to
>the 8830.200 to 8830.400 range.
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>typically do that at 300hz on the low end. True there is a bit of
>personal preference as to liking a bass sound or a more treble
>communications presence.
>
>Terry K9TW

56404. Re: [TS-520_820_530_830] Carrier osc adjustment

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-14 11:51:50 UTC
From: wagstw46@...
Topic: 56394 Message: 56404

Hi Lou:

Yes with one exception there is a typo in the message that you cite. Wish someone would have caught it. You adjust for 6dB roll off and not 3dB roll off. Have to keep voltage and power straight in your head when working with dB levels!

You start by injecting 1500hz at 7mv into the mic connector. You increase the mic gain until you have 50 watts output displayed on the wattmeter. 50 watts is used as it takes a little time to make the carrier oscillator trimmer cap adjustments so need to reduce the keydown plate current that the final tubes will be subjected to.

Once you have 50 watts you then reduce the AF gen frequency to 300hz and adjust either LSB or USB trimmer for approx 12.5 watts. You then set AF gen for 2700hz and look at the wattage to see if close to 12.5 watts. May need to go back and forth a few times to get the wattage at 300hz to match the wattage at 2700hz. This assumes you want matching symmetrical response. Can just adjust at 300hz and go on to the opposite sideband. This works well as most folks like a more bass response.

Need to follow the steps in the Service Manual for your particular model hybrid. Some have a pre-step where a trimmer is adjusted so that 50 watts is first balanced on each sideband.

Some call this alignment step “SSB frequency response adjustment” and others call it “Adjusting the Carrier Set Point”. Whatever you call it you are deciding where you insert the carrier oscillator into the crystal IF filter passband. As I previously mentioned best practice is not to spend a lot of time trying to set them precisely to 8828.500 and 8831.500 using a Freq counter.

The mic line injection method requires using a good AF gen or Arbitrary waveform gen that has accurate and stable output voltage and frequency.

If you don’t have that test gear some folks use the S-meter and Marker zero beat method, some just balance the back ground noise tone by ear, some use the Moni on rigs that have it and listen and match the tone of their own voice.

When I am finished I verify using audio spectrum analyzer software and make copies of the as-left response available to my customers if interested. I believe there are samples in the Files.

Terry K9TW

56405. [TS-520_820_530_830] Clicking when changing mode on a 530S?

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-14 06:50:53 UTC
From: Greg W.
Topic: 56405 Message: 56405

Hey all,

Recently whenever I change the mode on my TS-530S (Tune, CW, USB, LSB), I hear an audible click from somewhere toward the back of the rig, and the needle on the meter drops to zero. A split-second later, another click is heard and the needle immediately returns to its proper position.

What's happening here? It never used to do that, and it doesn't even do it all the time when I change mode. Usually changing the mode does not cause a click or a major deflection of the needle, so I'd like to figure out what it is before I use it too much more.

Thanks, everyone!

---Greg

56406. Need expert on vacuum tubes

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-14 13:16:11 UTC
From: treasurebox7762@...
Topic: 56406 Message: 56406

Hello,

While I have been a member for awhile this is my first post.
I received my ham radio license a couple of years ago at age 69 wanting to get into ham radio since the age of 10 but life said ‘NO!’ until now so I am beginning my learning process.

About a year ago I picked up a Kenwood TS-530SP, read the manual and with some of my Amateur Radio Clubs experts we hooked it up to our clubs antenna and with manual in hand began the tuning process. All went well until trying to transmit where we had some problems so I turned the radio over to a fellow ham with many years of experience with both tube and solid state experience.

He found that there were problems with all 3 tubes and that I should replace them. He also found that the inside was very clean and only had to resolder 1 joint.

I am trying to save some money so went through my 3 boxes of tubes and ran across the following. (Note: The radio had 6145 tubes in it not the 6146B that the manual stated.)

I ran across a Westinghouse box marked WL-8298A/6146B. So far so good (I know not to depend on what the box says).

I opened the box and wrapped in the corrugated wrapper was what appeared to be a brand new tube with the following markings:

On the glass envelope there is a stamp that says 6146A USA.
But Wait! There’s More!
On the metal base: 8298A/6146B
Date code? 69-35

Would I be correct in assuming that this is a 6146A tube and not a 6143B?

I am not sure my name and call sign will show up so I will sign here just in case.

Thank You,
Steven
KC3DOW

56407. Re: [TS-520_820_530_830] Clicking when changing mode on a 530S?

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-14 16:52:52 UTC
From: wagstw46@...
Topic: 56405 Message: 56407

Do you have the VOX button depressed?

Terry K9TW

56408. Re: [TS-520_820_530_830] Clicking when changing mode on a 530S?

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-14 17:52:48 UTC
From: Greg W.
Topic: 56405 Message: 56408

Whelp, I'm an idiot; it WAS pushed in. I must have bumped it when I was rearranging my desk the other day. I never use it, so that never even crossed my mind.

Sorry, but thanks for the tip!

---Greg

On Sat, Jan 14, 2017 at 10:52 AM, wagstw46@... [TS-520_820_530_830] <TS-520_820_530_830@yahoogroups.com> wrote:

>
>
> Do you have the VOX button depressed?
>
> Terry K9TW
>
>
>

56409. Re: [TS-520_820_530_830] Clicking when changing mode on a 530S?

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-14 20:22:55 UTC
From: John Davidson
Topic: 56405 Message: 56409

T/R relay clicking ? :D My radio is Ham Radio...CW is Real Radio 73, John...K8JD

From: "'Greg W.' f1fanschumi@... [TS-520_820_530_830]"
<TS-520_820_530_830@yahoogroups.com>
To: TS-520_820_530_830@yahoogroups.com
Sent: Saturday, January 14, 2017 12:52 PM
Subject: Re: [TS-520_820_530_830] Clicking when changing mode on a 530S?

Whelp, I'm an idiot; it WAS pushed in. I must have bumped it when I was rearranging my desk the other day. I never use it, so that never even crossed my mind.
Sorry, but thanks for the tip!
---Greg

On Sat, Jan 14, 2017 at 10:52 AM, wagstw46@... [TS-520_820_530_830]
<TS-520_820_530_830@yahoogroups.com> wrote:

Do you have the VOX button depressed?
Terry K9TW

56410. Re: [TS-520_820_530_830] Clicking when changing mode on a 530S?

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-14 20:40:19 UTC
From: wagstw46@...
Topic: 56405 Message: 56410

No reason to be sorry. Easy thing for anyone to have happen especially with a push button switch.

Terry K9TW

56411. Re: [TS-520_820_530_830] Clicking when changing mode on a 530S?

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-14 20:43:04 UTC
From: I.E.G.
Topic: 56405 Message: 56411

...Then there was the one about the "fix button" on MY 830 ...

AF7XT Dennis

On Sat, Jan 14, 2017 at 12:40 PM, wagstw46@... [TS-520_820_530_830] <
TS-520_820_530_830@yahoogroups.com> wrote:

>
>
> No reason to be sorry. Easy thing for anyone to have happen especially
> with a push button switch.
>
> Terry K9TW
>
>
>

--
one of these days I will have an internet connection faster than my computer

56412. Re: [TS-520_820_530_830] Clicking when changing mode on a 530S?

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-14 20:53:14 UTC
From: Joseph Stiles
Topic: 56405 Message: 56412

Greg,
 Very cheap fix! Don't feel bad...it's happened to all of us...whether we admit it or not.

 73
Joe wb7uqu

On Saturday, January 14, 2017 12:44 PM, "'I.E.G.' kopcicle@... [TS-520_820_530_830]" <TS-520_820_530_830@yahoogroups.com> wrote:

  ...Then there was the one about the "fix button" on MY 830 ...

AF7XT Dennis

On Sat, Jan 14, 2017 at 12:40 PM, wagstw46@... [TS-520_820_530_830] <TS-520_820_530_830@yahoogroups.com> wrote:

  No reason to be sorry. Easy thing for anyone to have happen especially with a push button switch.
Terry K9TW

--
one of these days I will have an internet connection faster than my computer

56413. Re: [TS-520_820_530_830] Need expert on vacuum tubes

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-14 21:17:19 UTC
From: Young Kim
Topic: 56406 Message: 56413

I will be happy to help you out.I have 12BY7 tube so it is no problem.The 6146B or A does not matter if you use them on SSB mode most of the time. And those days marking is sporadic, so I would trust the marking of the metal ring.Let me know if you get full output on the radio with westinghouse tubes or you need 12BY7 as well.Let me know.Young KimK6hm

On Saturday, January 14, 2017 8:30 AM, "treasurebox7762@... [TS-520_820_530_830]" <TS-520_820_530_830@yahoogroups.com> wrote:

Hello,
WhileI have been a member for awhile this is my first post.Ireceived my ham radio license a couple of years ago at age 69wanting to get into ham radio since the age of 10 but life said ‘NO!’until now so I am beginning my learning process.
Abouta year ago I picked up a Kenwood TS-530SP, read the manual and withsome of my Amateur Radio Clubs experts we hooked it up to our clubsantenna and with manual in hand began the tuning process. All wentwell until trying to transmit where we had some problems so I turnedthe radio over to a fellow ham with many years of experience withboth tube and solid state experience.
Hefound that there were problems with all 3 tubes and that I shouldreplace them. He also found that the inside was very clean and only had to resolder 1 joint.

Iam trying to save some money so went through my 3 boxes of tubes andran across the following. (Note: The radio had 6145 tubes in it notthe 6146B that the manual stated.)
Iran across a Westinghouse box marked WL-8298A/6146B. So far so good(I know not to depend on what the box says).
Iopened the box and wrapped in the corrugated wrapper was whatappeared to be a brand new tube with the following markings:
Onthe glass envelope there is a stamp that says 6146A USA.ButWait! There’s More!Onthe metal base: 8298A/6146BDatecode? 69-35
WouldI be correct in assuming that this is a 6146A tube and not a 6143B?
I am not sure my name and call sign will show up so I will sign here just in case.

ThankYou,StevenKC3DOW

56414. Re: [TS-520_820_530_830] Clicking when changing mode on a 530S?

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-15 16:58:57 UTC
From: nw0m_mitch@...
Topic: 56405 Message: 56414

I've noticed this on my 530S but didn't give much thought to it.

I leave the VOX always on since I always use semi-breakin CW. I also use the VOX for my straight key during final tuning in CW mode.

Is there a problem leaving the VOX on? There is no info in the manual on this that I could find.

73, Mitch
NWØM

56415. Re: [TS-520_820_530_830] Need expert on vacuum tubes

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-15 13:45:31 UTC
From: Steven
Topic: 56406 Message: 56415

Thanks for replying.I am going to need both transmission tubes and will use the Westingtonhouse for 1 of them.I read on this forum (can't remember where) that they do not need to be a matched set so I will keep an eye out for another one. I may just get a couple of the Tay's so I can get started.
I have a couple of the 12BY7's but the are border line good so I may take you up on your offer.Thanks for the help. At this point I know just enough to make me dangerous :) Steven KC3DOW

On Saturday, January 14, 2017 4:20 PM, "Young Kim ykpwr45@... [TS-520_820_530_830]" <TS-520_820_530_830@yahoogroups.com> wrote:

I will be happy to help you out.I have 12BY7 tube so it is no problem.The 6146B or A does not matter if you use them on SSB mode most of the time. And those days marking is sporadic, so I would trust the marking of the metal ring.Let me know if you get full output on the radio with westinghouse tubes or you need 12BY7 as well.Let me know.Young KimK6hm

On Saturday, January 14, 2017 8:30 AM, "treasurebox7762@... [TS-520_820_530_830]" <TS-520_820_530_830@yahoogroups.com> wrote:

Hello,
WhileI have been a member for awhile this is my first post.Ireceived my ham radio license a couple of years ago at age 69wanting to get into ham radio since the age of 10 but life said ‘NO!’until now so I am beginning my learning process.
Abouta year ago I picked up a Kenwood TS-530SP, read the manual and withsome of my Amateur Radio Clubs experts we hooked it up to our clubsantenna and with manual in hand began the tuning process. All wentwell until trying to transmit where we had some problems so I turnedthe radio over to a fellow ham with many years of experience withboth tube and solid state experience.
Hefound that there were problems with all 3 tubes and that I shouldreplace them. He also found that the inside was very clean and only had to resolder 1 joint.

Iam trying to save some money so went through my 3 boxes of tubes andran across the following. (Note: The radio had 6145 tubes in it notthe 6146B that the manual stated.)
Iran across a Westinghouse box marked WL-8298A/6146B. So far so good(I know not to depend on what the box says).
Iopened the box and wrapped in the corrugated wrapper was whatappeared to be a brand new tube with the following markings:
Onthe glass envelope there is a stamp that says 6146A USA.ButWait! There’s More!Onthe metal base: 8298A/6146BDatecode? 69-35
WouldI be correct in assuming that this is a 6146A tube and not a 6143B?
I am not sure my name and call sign will show up so I will sign here just in case.

ThankYou,StevenKC3DOW

56416. Re: TS-520S - broken Coil T13 IF Unit

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-15 17:31:29 UTC
From: webgoofy@...
Topic: 56380 Message: 56416

Hello Group;

Many thanks for replying to my post.
I will contact Walter regarding the parts I need.
Meanwhile I found two more missing or broken cores on the OSC Coil Unit.
And I think that are not the last parts that I need ;-)

73 DH5GP

Gregor

56417. Re: [TS-520_820_530_830] Need expert on vacuum tubes

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-15 23:32:28 UTC
From: Young Kim
Topic: 56406 Message: 56417

Steve,Just send me a personal e-mail to youngkim@....I will ship two 6146B and 12BY7. I need your address.You may send me a postage charge.Thank you.Young K6hm

On Sunday, January 15, 2017 9:08 AM, "Steven treasurebox7762@... [TS-520_820_530_830]" <TS-520_820_530_830@yahoogroups.com> wrote:

Thanks for replying.I am going to need both transmission tubes and will use the Westingtonhouse for 1 of them.I read on this forum (can't remember where) that they do not need to be a matched set so I will keep an eye out for another one. I may just get a couple of the Tay's so I can get started.
I have a couple of the 12BY7's but the are border line good so I may take you up on your offer.Thanks for the help. At this point I know just enough to make me dangerous :) Steven KC3DOW

On Saturday, January 14, 2017 4:20 PM, "Young Kim ykpwr45@... [TS-520_820_530_830]" <TS-520_820_530_830@yahoogroups.com> wrote:

I will be happy to help you out.I have 12BY7 tube so it is no problem.The 6146B or A does not matter if you use them on SSB mode most of the time. And those days marking is sporadic, so I would trust the marking of the metal ring.Let me know if you get full output on the radio with westinghouse tubes or you need 12BY7 as well.Let me know.Young KimK6hm

On Saturday, January 14, 2017 8:30 AM, "treasurebox7762@... [TS-520_820_530_830]" <TS-520_820_530_830@yahoogroups.com> wrote:

Hello,
WhileI have been a member for awhile this is my first post.Ireceived my ham radio license a couple of years ago at age 69wanting to get into ham radio since the age of 10 but life said ‘NO!’until now so I am beginning my learning process.
Abouta year ago I picked up a Kenwood TS-530SP, read the manual and withsome of my Amateur Radio Clubs experts we hooked it up to our clubsantenna and with manual in hand began the tuning process. All wentwell until trying to transmit where we had some problems so I turnedthe radio over to a fellow ham with many years of experience withboth tube and solid state experience.
Hefound that there were problems with all 3 tubes and that I shouldreplace them. He also found that the inside was very clean and only had to resolder 1 joint.

Iam trying to save some money so went through my 3 boxes of tubes andran across the following. (Note: The radio had 6145 tubes in it notthe 6146B that the manual stated.)
Iran across a Westinghouse box marked WL-8298A/6146B. So far so good(I know not to depend on what the box says).
Iopened the box and wrapped in the corrugated wrapper was whatappeared to be a brand new tube with the following markings:
Onthe glass envelope there is a stamp that says 6146A USA.ButWait! There’s More!Onthe metal base: 8298A/6146BDatecode? 69-35
WouldI be correct in assuming that this is a 6146A tube and not a 6143B?
I am not sure my name and call sign will show up so I will sign here just in case.

ThankYou,StevenKC3DOW

56418. For sale: TenTec keyer with paddles, for grounded grid rigs

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-16 00:21:11 UTC
From: zehrhj@...
Topic: 56418 Message: 56418

TenTec KR-40 iambic keyer with built in adjustable magnetic paddles. Added jack on back allows other paddles to be used. Also on back a small push button that keys the transmitter for tuning. Works with the higher keying voltages of grid block keying in Kenwood hybrids. $20 plus shipping from VA. Email address good in QRZ.
73
Howard K4LXY

56419. Re: For sale: TenTec keyer with paddles, for grounded grid rigs

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-16 03:26:31 UTC
From: zehrhj@...
Topic: 56418 Message: 56419

This is sold - 73 Howard K4LXY

56420. For sale

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-16 13:31:35 UTC
From: jcidlik@...
Topic: 50769 Message: 56420

TS-830s & MC-50 excellent condition. Works flawlessly. $525. downsizing my shack.
jcidlik@gmail.com Cid, K2CID

56421. Kenwood Hybrid Net Update (January 18, 2017)

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-18 14:58:21 UTC
From: Mark Gilger
Topic: 56421 Message: 56421

Net Info:
Saturday: 7.235 @ 3:30pm Eastern following the Swan Tech Net
Sunday: 14.316 @ 1800 UTC following the ICOM net

Web Site:
<http://www.wb4hfn.com/KENWOOD/KenwoodHomePage.htm>http://www.wb4hfn.com/KENWOOD/KenwoodHomePage.htm

The net started its existence on November 1st,
2011. The yearly check-in totals are posted at the bottom of this message.

The Saturday net was run by me, WB0IQK. There
were 17 stations checking in under POOR band conditions.

We had the following number of radios checking in.
3 running TS-520(x)
3 running TS-530(x)
1 running TS-820(x)
4 running TS-830S
0 running TS-510
0 running TS-511
0 running TS-515
0 running 599 twins
0 running TS-900

I was running my TS-830S + Drake L-4B amplifier.

The Sunday net was run by Greg, WQ0P. There were
13 stations checking in under POOR band conditions.

We had the following number of radios checking in.
2 running TS-520(x)
2 running TS-530(x)
3 running TS-820(x)
3 running TS-830S
0 running TS-510
0 running TS-511
0 running TS-515
0 running 599 twins
0 running TS-900

We have been having several people checking in
regularly with their TS-430, TS-440, and
TS-940□s, which of course is not a hybrid,
although over 30+ years old. Everyone is welcome
as long as they have an interest in the older equipment.

If anyone would be interested in filling in as a net control station, please send me an email. Currently it's just myself, Jimmy, WB2KNR, and Greg, WQ0P . I would like to get several more. If we do, we can alternate so everyone might be on a 3-4 week rotation. It's a lot of fun and a good way to make sure you station is optimized.

For anyone that has not heard, we have a new web site that WB4HFN is hosting. He currently has a very nice site for Drake, Collins and Heathkit and now Kenwood Hybrids. Good quality manuals plus sale flyers and brochures will be found here, along with user supplied information for all Hybrids.

His URL is:
<http://www.wb4hfn.com/KENWOOD/KenwoodHomePage.htm>http://www.wb4hfn.com/KENWOOD/KenwoodHomePage.htm

To date, we have had the following check-in:

Nov. 2011 ☐ Oct. 2012 Saturday total 754
check-ins, Sunday total 563 check-ins
Nov. 2012 - Oct. 2013 Saturdays total 828 check-ins, Sunday total 609 check-ins
Nov. 2013 - Oct. 2014 Saturdays total 842 check-ins, Sunday total 744 check-ins
Nov. 2014 ☐ Oct 2015 Saturdays total 962 check-ins, Sunday total 669 check-ins
Nov. 2015 ☐ Oct 2016 Saturdays total 807 check-ins, Sunday total 628 check-ins

November 2016, Saturday net total = 80, Sunday total = 68
December 2016, Saturday net total = 73, Sunday total = 69
January 2017, Saturday net total = 30, Sunday total = 51 (Month to date)

Net Info:
Saturday: 7.235 @ 3:30 Eastern following the Swan Tech Net
Sunday: 14.316 @ 1800 UTC following the ICOM net

Web Site:
<http://www.wb4hfn.com/KENWOOD/KenwoodHomePage.htm>http://www.wb4hfn.com/KENWOOD/KenwoodHomePage.htm

73's,
Mark, WB0IQK

56422. Kenwood Hybrid Net Update (January 22, 2017)

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-22 19:48:02 UTC
From: Mark Gilger
Topic: 56422 Message: 56422

Net Info:
Saturday: 7.235 @ 3:30pm Eastern following the Swan Tech Net
Sunday: 14.316 @ 1800 UTC following the ICOM net

Web Site:
<http://www.wb4hfn.com/KENWOOD/KenwoodHomePage.htm>http://www.wb4hfn.com/KENWOOD/KenwoodHomePage.htm

The net started its existence on November 1st,
2011. The yearly check-in totals are posted at the bottom of this message.

The Saturday net was run by me, WB0IQK. There
were 10 stations checking in under POOR band
conditions due to QRM from stations working the North American QSO Party.

We had the following number of radios checking in.
2 running TS-520(x)
3 running TS-530(x)
1 running TS-820(x)
4 running TS-830S
0 running TS-510
0 running TS-511
0 running TS-515
0 running 599 twins
0 running TS-900

I was running my TS-830S + Drake L-4B amplifier.

The Sunday net was run by me, WB0IQK. There were
25 stations checking in under GOOD band conditions due to QRM.

We had the following number of radios checking in.
4 running TS-520(x)
1 running TS-530(x)
1 running TS-820(x)
7 running TS-830S
0 running TS-510
0 running TS-511
0 running TS-515
0 running 599 twins
1 running TS-900

I was running my TS-830S + Drake L-4B amplifier.

We have been having several people checking in
regularly with their TS-430, TS-440, and
TS-940□s, which of course is not a hybrid,

although over 30+ years old. Everyone is welcome
as long as they have an interest in the older equipment.

If anyone would be interested in filling in as a
net control station, please send me an email.
Currently it's just myself, Jimmy, WB2KNR, and
Greg, WQ0P . I would like to get several more. If
we do, we can alternate so everyone might be on a
3-4 week rotation. It's a lot of fun and a good
way to make sure you station is optimized.

For anyone that has not heard, we have a new web
site that WB4HFN is hosting. He currently has a
very nice site for Drake, Collins and Heathkit
and now Kenwood Hybrids. Good quality manuals
plus sale flyers and brochures will be found
here, along with user supplied information for all Hybrids.

His URL is:
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mePage.htm

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check-ins, Sunday total 563 check-ins
Nov. 2012 - Oct. 2013 Saturdays total 828 check-ins, Sunday total 609 check-ins
Nov. 2013 - Oct. 2014 Saturdays total 842 check-ins, Sunday total 744 check-ins
Nov. 2014 ☐ Oct 2015 Saturdays total 962 check-ins, Sunday total 669 check-ins
Nov. 2015 ☐ Oct 2016 Saturdays total 807 check-ins, Sunday total 628 check-ins

November 2016, Saturday net total = 80, Sunday total = 68
December 2016, Saturday net total = 73, Sunday total = 69
January 2017, Saturday net total = 40, Sunday total = 76 (Month to date)

Net Info:
Saturday: 7.235 @ 3:30 Eastern following the Swan Tech Net
Sunday: 14.316 @ 1800 UTC following the ICOM net

Web Site:
<http://www.wb4hfn.com/KENWOOD/KenwoodHomePage.htm>http://www.wb4hfn.com/KENWOOD/KenwoodHo
mePage.htm

73's,
Mark, WB0IQK

56423. TS-820s

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-28 18:05:48 UTC
From: ezi7qpnxkecqprbhry5ciwupocllpcxyangbyn7l@...
Topic: 23334 Message: 56423

Hi Folks, I have a 820 I am working on. Seems to receive fine. On transmit I have no ALC at all and maybe a tenth of a watt output. Bias is set at 60. IP current never changes from 60 when trying to tune. In otherwords there is no dip or any change in the ip current no matter what I do. Just stays at 60 all the time in tune or CW mode. OK, I hope I described this correctly. I will add that watching the RF meter I can change the little bit of rf output with the load,plate and drive knobs. But, again the power output in barely measureable. No alc reading at all and the carrier knob is fully clockwise also.
Any help is appreciated!!
Thanks!! 73 Tim W8KMA

56424. Re: TS-820s

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-28 19:43:26 UTC
From: n4jhy@...
Topic: 23334 Message: 56424

Hi Jim, I am kind of a newbie on this group, but have gained a ton of experience working on a TS820s I bought for $50 back in the end of November.

This group has some really sharp guys, that are very interested in helping other hams out.

I received some very good suggestions on my road to a perfectly working 820s from this group.

My suggestion is to substitute a new driver tube, and then maybe a known good pair of finals.

When you start your tune up procedure, are you able to see "alc" indication with the radio in "tune",
the carrier control about 3-5, the meter in "ALC" and the radio put into XMIT, adjusting the "Drive" control?

If no ALC indication, then a new driver might take care of the problem, maybe.

Give that a try, and maybe some other members will chime in on this one.

Best luck, the TS820s is a fantastic radio once repaired and aligned. Sweet sounding receiver and super powerful TX audio.

73, Bruce N4JHY

56425. Looking For Filters For 830

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-28 19:17:14 UTC
From: wu2m@...
Topic: 56425 Message: 56425

Hi all,
I am looking for a YG455C and a YK88C for one of my 830s. Anyone have one they would like to sell?
Thanks,
Rocco
WU2M

56426. Re: TS-820s

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-28 19:15:43 UTC
From: wu2m@...
Topic: 23334 Message: 56426

I had an 830 act similar. I fount the wire on the plate choke was broken. Soldered it up and all was fine.

73,
Rocco WU2M

56427. Re: TS-820s

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-29 03:21:36 UTC
From: ezi7qpnxkecqprbhry5ciwupocllpcxyangbyn7l@...
Topic: 23334 Message: 56427

I have also replaced the driver tube and final tubes with same results...
73 W8KMA

56428. Re: TS-820s

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-29 03:20:36 UTC
From: ezi7qpnxkecqprbhry5ciwupocllpcxyangbyn7l@...
Topic: 23334 Message: 56428

I have also replaced the driver and final tubes with no change.

tx

W8KMA

56429. Re: Looking For Filters For 830

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-29 15:15:53 UTC
From: w0nta@...
Topic: 56425 Message: 56429

Hi Rocco,

I have the filters that you are looking for. Contact me off list at w0nta@arrl.net.

73, Dick, W0NTA

56430. Kenwood Hybrid Radio Net Update (January 29, 2017)

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-29 19:24:38 UTC
From: Mark Gilger
Topic: 56430 Message: 56430

Net Info:
Saturday: 7.235 @ 3:30pm Eastern following the Swan Tech Net
Sunday: 14.316 @ 1800 UTC following the ICOM net

Web Site:
<http://www.wb4hfn.com/KENWOOD/KenwoodHomePage.htm>http://www.wb4hfn.com/KENWOOD/KenwoodHomePage.htm

The net started its existence on November 1st,
2011. The yearly check-in totals are posted at the bottom of this message.

The Saturday net was run by Jimmy, WB2KNR. There
were 12 stations checking in under POOR band
conditions due to QRM from stations working the North American QSO Party.

We had the following number of radios checking in.
4 running TS-520(x)
2 running TS-530(x)
1 running TS-820(x)
2 running TS-830S
0 running TS-510
0 running TS-511
0 running TS-515
0 running 599 twins
0 running TS-900

I was running my TS-830S + Drake L4B amplifier.

The Sunday net was run by me, WB0IQK. There were
14 stations checking in under GOOD band
conditions. There we 1 new stations checking in today, George, K3MYK.

We had the following number of radios checking in.
4 running TS-520(x)
0 running TS-530(x)
1 running TS-820(x)
3 running TS-830S
0 running TS-510
0 running TS-511
0 running TS-515
0 running 599 twins
1 running TS-900

I was running my TS-830S + Drake L-4B amplifier.

We have been having several people checking in
regularly with their TS-430, TS-440, and

TS-940□s, which of course is not a hybrid,
although over 30+ years old. Everyone is welcome
as long as they have an interest in the older equipment.

If anyone would be interested in filling in as a
net control station, please send me an email.
Currently it's just myself, Jimmy, WB2KNR, and
Greg, WQ0P . I would like to get several more. If
we do, we can alternate so everyone might be on a
3-4 week rotation. It's a lot of fun and a good
way to make sure you station is optimized.

For anyone that has not heard, we have a new web
site that WB4HFN is hosting. He currently has a
very nice site for Drake, Collins and Heathkit
and now Kenwood Hybrids. Good quality manuals
plus sale flyers and brochures will be found
here, along with user supplied information for all Hybrids.

His URL is:
<http://www.wb4hfn.com/KENWOOD/KenwoodHomePage.htm>http://www.wb4hfn.com/KENWOOD/KenwoodHo
mePage.htm

To date, we have had the following check-in:

Nov. 2011 □ Oct. 2012 Saturday total 754
check-ins, Sunday total 563 check-ins
Nov. 2012 - Oct. 2013 Saturdays total 828 check-ins, Sunday total 609 check-ins
Nov. 2013 - Oct. 2014 Saturdays total 842 check-ins, Sunday total 744 check-ins
Nov. 2014 □ Oct 2015 Saturdays total 962 check-ins, Sunday total 669 check-ins
Nov. 2015 □ Oct 2016 Saturdays total 807 check-ins, Sunday total 628 check-ins

November 2016, Saturday net total = 80, Sunday total = 68
December 2016, Saturday net total = 73, Sunday total = 69
January 2017, Saturday net total = 50, Sunday total = 90 (Month to date)

Net Info:
Saturday: 7.235 @ 3:30 Eastern following the Swan Tech Net
Sunday: 14.316 @ 1800 UTC following the ICOM net

Web Site:
<http://www.wb4hfn.com/KENWOOD/KenwoodHomePage.htm>http://www.wb4hfn.com/KENWOOD/KenwoodHo
mePage.htm

73's,
Mark, WB0IQK

56431. Complete TS 520S station

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-31 06:00:50 UTC
From: beeson.neil@...
Topic: 56431 Message: 56431

G'day all
Before xmas I posted some pics of 2 years of searching . It's of my complete TS 520S station. I've yet to find any other pics of a station this complete but if you have some I would love to see them, even with Kenwood key ring and pen.
Hope you enjoy.

73
Neil
VK6NSB

56432. File - Message on approved membership.txt

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-01 03:06:59 UTC
From: TS-520_820_530_830@yahoogroups.com
Topic: 54481 Message: 56432

Welcome to the Yahoo Kenwood TS-520_820_530_830 Amateur Radio Group. This group is comprised of members who's interest is in maintaining and operating the Kenwood TS-520, TS-820, TS-530, TS-830, TS-510, TS-511, T-599/R599 and R820 Hybrid transceivers, transmitter and receivers. In addition, the group supports discussions covering the associated Kenwood accessories such as the VFO-520, VFO-820, VFO-230, and VFO-240 remote VFOs, the Kenwood antenna tuners, and the various Kenwood desk and hand microphones.

This is a restricted group requiring membership approval prior to receiving and posting messages to the group. To join the group simply complete the Yahoo Kenwood TS-520_820_530_830 Group's application process by clicking on the “+ Join Group” icon on the group's homepage. Select the desired method of receiving messages by clicking the appropriate radio button, then provide a brief description about yourself to include: your first name, your Amateur Radio call sign, your interest in the Kenwood hybrid radio, and the model of Kenwood hybrid you own, operate, or in the process of purchasing in the text box provided. If you are not a licensed Amateur Radio operator, no problem, simply complete the application process and provide the same information less the Amateur Radio call sign. Once you have completed the text, click the Join Group icon. Your application will be reviewed and approved by a group co-owner or Moderator. If you leave the application text box blank, your application for membership will be rejected. Simply reapply and provide the information requested and resubmit your application for membership.

New members are placed on a "Moderate" status. This means that any message a new member posts to the group must be approved by a group co-owner or Moderator before it appears on the group server for all members to see. The length of time a new member remains in a "Moderate message status" is determined by the members ability to adhere to, and follow the group's policies. The faster the new member(s) can prove they are adhering to, and following the group's policies, the quicker the new member's status will be changed to “Allowed”.

The “Allowed” status means the member can submit/post their messages without group co-owner or Moderator's approval. A member who's message status is set to “Allowed” may have their message status changed to "Moderate" if it is deemed necessary by a group co-owner or Moderator for one of the following reasons:

1. Failure to follow the group's policies after being informed by a group co-owner or Moderator
2. Knowingly violate any of the group's policies
3. Any improper behavior by the member that is deemed inappropriate by a group co-owner or Moderator

The group is moderated by both group co-owners and group Moderators. While we would like to have a group co-owner and/or Moderator present 24/7, that is not possible, as group co-owners and Moderators have a life too. Therefore, there will be times when a group co-owner and/or a moderator will not be present. This will affect the time a moderated member's messages may take to get approved/rejected. This occurs most often during major holidays Also, the group's server is not maintained by the group co-owner(s) or Moderators.

Therefore, when Yahoo has problems affecting Yahoo Groups, ALL members will simply have to wait for Yahoo to fix the problem. Group co-owners and Moderators also do not have any control over how the group's server handles attachments to messages or how message search results are provided.

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As stated above, this group has a set of policies that all members must agree to and abide by. If any member, new or old, that feels they cannot accept the group's policies, that member is free to terminate their membership at any time without notifying the group co-owners and/or Moderators.

Group's Policies:

1. Profanity of any type, regardless of the word and/or phrase(s) used in a message, is not allowed. This includes the use of abbreviation to improper words, use of symbols to substitute for letters, etc. In short, the use of profanity is NOT ALLOWED, PERIOD!!! The quickest way to get banned from this group is to use profanity!!!

2. Disrespect/Flaming any member regardless of the reason, is not allowed.

3. Taking over a thread by a member that changes the threads original subject and content, is not allowed.

4. Messages that contain as part of the message text, discussions of a member's private life are not allowed. Responses to messages are to pertain to the original message subject.

5. Long discussions that are products of an original messages are not allowed. If there are 2 or 3 members who wish to discuss a subject in more detail and at great lengths should take their discussions off the group and continue their discussions using private email addresses.

6. MESSAGES THAT DO NOT CONTAIN ACCEPTABLE MESSAGE SIGNATURES, WILL BE SUMMARILY REJECTED! It takes less than 5 seconds to ensure your message contains an acceptable message signature. There is no excuse for not adding a message signature to your messages. Political or religious signatures/statements are not permitted.

The following are examples of the ONLY acceptable message signatures:

Licensed Amateur Radio members:

Example:
“73s
John WA1ABC”

Non-licensed members

Example:

73s
Mary

If a member does not wish to include their Amateur Radio call sign in their signature, then simply use their first/given/Christian name ONLY, same as non-licensed members.

Each message signature must be positioned at the bottom of the message text and separated by at least one line.

For example:

Hi John,

Yes capacitor C25 is the right cap you should be checking. For details, review the schematic.

73s
Bill

Screen names such as JLH524 or MWPO125 are not acceptable message signatures. Screen names are acceptable ONLY when used as part of the member's email address.

The member's email address is not an acceptable message signature, regardless whether the member's name appears in the email address or not.

A member's “initials” are not acceptable as a messages signature.

A member may add up to 2 additional lines to their message signature. The additional 2 lines may contain a link to the member's website and a link to the member's Amateur Radio club etc. The addition of 3 or more lines to the message signature, listing the many different clubs the member belongs to, the positions they hold within the respective club(s), their professional position within the company the member works for, and other information is considered excessive and not allowed. The following is an example of an acceptable message signature containing two additional line:

73
Mike-w5rkl
www.w5rkl.com
Yahoo Kenwood TS-520_820_530_830 Moderator (Mike-w5rkl is no longer a Moderator, but used as an example--tnx)

In the past there have been members who state our group policies are too strict. We maintain strict group policies for 2 simple reasons:

1. To maintain good order and discipline in the group.
2. Provide a friendly group where all members are treated equally and an environment free of improper behavior

73
Yahoo Kenwood TS-520_820_530_830 Hybrid Group Co-owners and Moderators.

56433. File - Rules, For Sale or Want to buy Posts

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-01 03:06:59 UTC
From: TS-520_820_530_830@yahoogroups.com
Topic: 54620 Message: 56433

Rules pertaining to Occasional For Sale and Want to Buy Posts.

Members of the TS-520_820_530_830 Yahoo Group who have been members for at least 30 days may place " for sale" posts no more frequently than two in any 30 day period." Want to buy" posts are permitted immediately upon membership and are limited to 2 in any 30 day period.

For sale posts are limited to the sale of TS-510, 515, 520, 820, 530, 830, and the 599 series twins, as well as Kenwood accessories intended for use with these radios.
Also, group members may post "service equipment" for sale. This may include, but are not limited to: vtvms, various signal generators, and other testing/service equipment. Posts must include: the make and model of the item for sale, as well as an accurate description of its condition, and the asking price.

When the item is sold, please make a short post to that effect.

Replies and discussions regarding these posts must be taken off of this group either by direct e-mail to the seller or as directed by the seller.

Buyers and sellers are on their own. The TS-520_820_530_830 Yahoo Group, its owners, co-owners, moderators, or members other than the seller, hold no responsibility for the accuracy of the posts or the credibility of the seller or buyer.

We do not expect that members of this group will misrepresent, or in any way cheat other members. At the co-owners(s)/moderators discretion, we may choose to ban any member from making further for sale posts, or ban the member from this group entirely if we believe their posts or transactions are not of the utmost integrity.

We ask that those who buy and sell equipment as a main business not post here. We will allow posts from members who occasionally restore and sell equipment/accessories as stated above.

We expect our members to use discretion. If excessive traffic develops as a direct result of these postings, they may have to be discontinued.

Walter Breining, N9WB
Joseph T Stiles, WB7UQU

56434. Re: TS-820s

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-01-29 03:35:09 UTC
From: ezi7qpnxkecqprbhry5ciwupocllpcxyangbyn7l@...
Topic: 23334 Message: 56434

Hi Bruce, I replaced the driver tube and finals with no change...

Thanks

Tim

56435. GREETINGS!

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-04 02:45:01 UTC
From: Kelly
Topic: 56435 Message: 56435

Thanks for the membership....
I am Really looking forward to this group as I am purchasing a TS-530SP.

73'S
KELLY

56436. Flashover when heating new tubes.

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-03 04:57:17 UTC
From: Charles Roberts
Topic: 56436 Message: 56436

I purchased a set of new tubes and put them in the final sockets.
Then turned on the heaters. I was told that I should not attempt to put
any power through them for the first 2 hours; just let the heaters heat
and let the getter's do their jobs. About 2-3 minutes the left tube
flashed and the left tube flashed. Turned off the rig.

The question is a two part, I guess. Should I use the tubes? It
this typical for old tubes?

Thanks
Chuck

56437. Re: [TS-520_820_530_830] GREETINGS!

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-04 17:24:57 UTC
From: Young Kim
Topic: 56435 Message: 56437

Congratulations, I am the owner of 530 and 830 and find that the used radio cost little difference less than $100, the same size very familiar looking but inside is totally better radio on 830, I will go for the TS830, it is a much better radio and you will be happier with 830.Good luck. (little typo error, sorry)YoungK6HM

On Friday, February 3, 2017 8:49 PM, "Kelly spooky1369@... [TS-520_820_530_830]" <TS-520_820_530_830@yahoogroups.com> wrote:

  Thanks for the membership....I am Really looking forward to this group as I am purchasing a TS-530SP.
73'S KELLY

56438. Kenwood Hybrid Net Update (February 5, 2017)

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-05 18:32:17 UTC
From: Mark Gilger
Topic: 56438 Message: 56438

Net Info:
Saturday: 7.235 @ 3:30pm Eastern following the Swan Tech Net
Sunday: 14.316 @ 1800 UTC following the ICOM net

Web Site:
<file:///http://www.wb4hfn.com/KENWOOD/KenwoodHomePage.htm>http://www.wb4hfn.com/KENWOOD/KenwoodHomePage.htm

The net started its existence on November 1st,
2011. The yearly check-in totals are posted at the bottom of this message.

The Saturday net was run by Jimmy, WB2KNR. There
were 21 stations checking in under GOOD band conditions.

We had the following number of radios checking in.
3 running TS-520(x)
4 running TS-530(x)
4 running TS-820(x)
2 running TS-830S
0 running TS-510
0 running TS-511
0 running TS-515
0 running 599 twins
0 running TS-900

I was running my TS-830S + Drake L4B amplifier.

The Sunday net was run by me, WB0IQK. There were
8 stations checking in under POOR band
conditions. There we 1 new stations checking in today, George, K3MYK.

We had the following number of radios checking in.
1 running TS-520(x)
0 running TS-530(x)
0 running TS-820(x)
1 running TS-830S
0 running TS-510
0 running TS-511
0 running TS-515
0 running 599 twins
1 running TS-900

I was running my TS-830S + Drake L-4B amplifier.

We have been having several people checking in
regularly with their TS-430, TS-440, and
TS-940□s, which of course is not a hybrid,

although over 30+ years old. Everyone is welcome
as long as they have an interest in the older equipment.

If anyone would be interested in filling in as a
net control station, please send me an email.
Currently it's just myself, Jimmy, WB2KNR, and
Greg, WQ0P . I would like to get several more. If
we do, we can alternate so everyone might be on a
3-4 week rotation. It's a lot of fun and a good
way to make sure you station is optimized.

For anyone that has not heard, we have a new web
site that WB4HFN is hosting. He currently has a
very nice site for Drake, Collins and Heathkit
and now Kenwood Hybrids. Good quality manuals
plus sale flyers and brochures will be found
here, along with user supplied information for all Hybrids.

His URL is:
<file:///http://www.wb4hfn.com/KENWOOD/KenwoodHomePage.htm>http://www.wb4hfn.com/KENWOOD/KenwoodHomePage.htm

To date, we have had the following check-in:

Nov. 2011 ☐ Oct. 2012 Saturday total 754
check-ins, Sunday total 563 check-ins
Nov. 2012 - Oct. 2013 Saturdays total 828 check-ins, Sunday total 609 check-ins
Nov. 2013 - Oct. 2014 Saturdays total 842 check-ins, Sunday total 744 check-ins
Nov. 2014 ☐ Oct 2015 Saturdays total 962 check-ins, Sunday total 669 check-ins
Nov. 2015 ☐ Oct 2016 Saturdays total 807 check-ins, Sunday total 628 check-ins

November 2016, Saturday net total = 80, Sunday total = 68
December 2016, Saturday net total = 73, Sunday total = 69
January 2017, Saturday net total = 50, Sunday total = 90
February 2017, Saturday net total = 21, Sunday total = 8 (Month to date)

Net Info:
Saturday: 7.235 @ 3:30 Eastern following the Swan Tech Net
Sunday: 14.316 @ 1800 UTC following the ICOM net

Web Site:
<file:///http://www.wb4hfn.com/KENWOOD/KenwoodHomePage.htm>http://www.wb4hfn.com/KENWOOD/KenwoodHomePage.htm

73's,
Mark, WB0IQK

56439. SDR Panadapter for TS-830s

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-06 00:30:37 UTC
From: zehrhj@...
Topic: 56439 Message: 56439

I recently bought a SDRplay SDR receiver. Today I plugged it into the IF 1 jack on my TS-830s and it appears to work fine as a panadapter. I'm curious whether anyone else has tried this.
73 Howard K4LXY

56440. VE3PVS Re-Cap Kit

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-05 18:51:27 UTC
From: k2dfc@...
Topic: 56440 Message: 56440

I have a TS-520 that I haven't used in almost 20 years. Would like to replace the Caps before turning on again. VE3PVS has what I assume is a complete kit. Has anyone replaced all caps? Any comments about doing this.
Fred K2DFC

56441. Re: VE3PVS Re-Cap Kit

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-06 01:05:11 UTC
From: zehrhj@...
Topic: 56440 Message: 56441

I started to replace all in my TS-830s but decided to let a professional do it. Personally I'd start by replacing the electrolytic filter caps - that may be all you need to do. I've had a number of TS-520 and TS-820 rigs that had been sitting. I replace the power supply caps and they worked fine.
73
Howard K4LXY

56442. Re: VE3PVS Re-Cap Kit

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-06 05:56:57 UTC
From: scottandalene@...
Topic: 56440 Message: 56442

Hi Fred,

Personally I would only replace the HV caps and the screen and driver caps, unless there is a reason to replace any others. These kits are available from K4EAA:

http://www.k4eaa.com/parts.htm http://www.k4eaa.com/parts.htm

The reason I would not try to replace all the caps is because you will have to lift all of the boards which could cause damage.

Just my opinion-others may not agree.

Enjoy your TS-520!

73s, Scott, N6CIC

56443. Re: VE3PVS Re-Cap Kit

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-06 03:21:03 UTC
From: k2dfc@...
Topic: 56440 Message: 56443

Thanks for the info. I considered sending it to someone. But it's a pretty heavy rig and shipping will cost a lot. But I bought the rig new and the thought of shipping it and the potential for damage has kept me from doing it. For me it can't be replaced.
K2DFC

---In TS-520_820_530_830@yahoogroups.com, <zehrhj@...> wrote :

I started to replace all in my TS-830s but decided to let a professional do it. Personally I'd start by replacing the electrolytic filter caps - that may be all you need to do. I've had a number of TS-520 and TS-820 rigs that had been sitting. I replace the power supply caps and they worked fine.
73
Howard K4LXY

56444. Microphone Kenwood MC-50 - microphone holder

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-06 07:27:02 UTC
From: casy_ch@...
Topic: 56444 Message: 56444

I have received a Kenwood Microphone MC-50 without holder which I would like to renovate and use.

Would somebody have a Kenwood microphone holder which he can part off? Paypal is no problem.

Kenwood holders have a slot to fix them to the mike base stud and not a 1/4in tap like audio mikes have.

Thank you and 73 de Jean-Claude, HB3YDH

56445. Re: VE3PVS Re-Cap Kit

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-06 13:48:35 UTC
From: ukg4jqx@...
Topic: 56440 Message: 56445

Hi Fred, I replaced all the caps in my TS520S. It was easy to get the HV equivalent caps, but the available screen caps were physically smaller, so I made a PCB to mount them on, and then put them in the original physical locations. The rest of the board caps were easy to replace - there is ample slack in the wiring harnesses to allow you to manipulate the boards & the old ones remove first time with a solder sucker. Its a time consuming process - but it does allow you to have a good look at everything. The HV bleeder resistors will almost certainly need replacing (mine were completely open circuit!) and I found various other suspect resistors that I changed as well. Its also an opportunity to clean up the switches and the like. It was also an opportunity to change some ageing insulation on some wires with shtick tubing where needed.
I measured many of the caps that I took out - many were out of specification, so its well worth doing.
Replace all caps with 105degC parts for the best life. I uprated the bleed resistors as well.
Be careful with the Service Manuals available on the internet - many are missing a page or two and if you use the parts lists in the manuals to derive the list of caps you need you will miss some. I simply went through the whole rig with a red marker pen (marking the top of each elec cap) and wrote down what was needed & then placed the order. I took a digital photo of every board before starting in case I got lost. I havent tried the cap kits available so cannot comment.
I highly recommend doing a full cap replacement - you will learn a lot, get a lot closer to the rig and how it works as well as gaining a huge amount of confidence with the rig itself. I work for myself from home and my TS520 line up is in daily use as background entertainment. The audio is terrific - my modern rigs are much harsher to listen to and as a result, rarely get turned on.

Good luck with it and 73
Charles G4JQX

56446. Re: VE3PVS Re-Cap Kit

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-06 17:00:50 UTC
From: zehrhj@...
Topic: 56440 Message: 56446

Scott's advice, (N6CIC) is good - that's the direction I'd recommend. Howard K4LXY

56447. Re: VE3PVS Re-Cap Kit

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-06 19:34:52 UTC
From: mgilger@...
Topic: 56440 Message: 56447

Fred,
If you have a Variac, you can reform them by bringing it up slowly over a 24 hour period, maybe 5 volts at a crack. If it comes up OK, then you can bypass replacing the caps and they will more than likely be a-OK for another 20 years or more years. In all of the Kenwood Hybrids that I've brought back to life, I've only replaced caps in 1 and that was because they looked like they had started to bulge a bit on the top. After I removed them, it turned out it was an optical illusion and they were OK. Oh Well....

The recommendation by many, myself included is that you can cause more problems doing the recap than if you just let it go and visually check electrolytics every once in a while for leakage or bulging.

Have fun.
Mark, WB0IQK

56448. Capacitor vendor

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-06 17:26:36 UTC
From: Rory
Topic: 56448 Message: 56448

Looking for the vendor that has the correct 3 lead caps for the screen and driver. I think Glen had source but I can't find the post.

Thanks

N6OIL

56449. Re: VE3PVS Re-Cap Kit

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-06 20:15:45 UTC
From: croberts@...
Topic: 56440 Message: 56449

I have two TS-520S's and one is a 'drifter'. So I am going to go the 're-cap kit' route for that one.

The other is very stable after a "final cage kit" was applied. It was DOA when I bought and I had intended it to be for spare parts on the original one. Now I have two!

Having a spare to work on give me an ability to get into the radio, do the re-cap kit and learn where everything is.

I'm also working on a digital display VFO. It is always nice to know where I am without having to do any math!

Chuck

56450. Thanks for adding me to the group

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-07 03:27:39 UTC
From: km4vox@...
Topic: 56450 Message: 56450

Thanks for adding me to the group 73s
Mike Mathis KM4VOX

56451. TS-520 issues

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-07 03:45:54 UTC
From: km4vox@...
Topic: 56451 Message: 56451

My uncle gifted me a TS-520. It is one heavy radio. Anyway the radio to look at it appears to be in great condition but it seems to have some issues. 1st it's been sitting on the shelf for a few years so it hasn't been used for about 10 years. I connected the coax and ground to it. Started by following the tune procedures from the manual I downloaded. Attempted to tune the rig but could not get the ACL to move. Increased the car but no change. Checked the HV it showed about 950. So I decided to try the receive on 80 meters. Volume was scratchy but not too bad. Was listening to several guys rag chew and it went quite. You can hear the volume is turned up but all you hear is very faint like almost a whisper. Tuned my other radio to match the frequency and transmitted to see if the 520 could receive, did OK not as good as it should be. Does anyone have any suggestions as to what it could be?
Thanks Mike KM4VOX

56452. Re: [TS-520_820_530_830] Capacitor vendor

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-07 04:45:02 UTC
From: Joseph Stiles
Topic: 56448 Message: 56452

Rory,
Try: justradios.com   the site is a bit busy...but look at the capacitor line up...and look for the "Richey Golds," then go find your value(s).Terry-k9tw, has used them before...and says that the diameter is just slightly smaller than original...so use a piece of large diameter heatshrink..or similar

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| |
Capacitors, Resistors and Schematics for Tube Radios / Electronics
Specializes in high voltage Capacitors and Resistors for vintage tube radios / electronics. Also carries schemat... | |

|

|

 73
Joe wb7uqu

On Monday, February 6, 2017 5:03 PM, "Rory n6oil@arrl.net [TS-520_820_530_830]" <TS-520_820_530_830@yahoogroups.com> wrote:

  Looking for the vendor that has the correct 3 lead caps for the screen and driver. I think Glen had source but I can't find the post.
Thanks
N6OIL

56453. Re: [TS-520_820_530_830] Capacitor vendor

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-07 05:45:02 UTC
From: Rory
Topic: 56448 Message: 56453

Thanks Joe, that's what I couldn't remember was the Richey Golds, I need to

start booking marking this stuff. I used the 4 caps deal on a terminal
strip and it looks like crap, so I want to use the dual caps for a cleaner
look and not like a "golden screwdriver" job!

73
N6OIL

On Mon, Feb 6, 2017 at 8:45 PM, Joseph Stiles stilesjoseph@...
[TS-520_820_530_830] <TS-520_820_530_830@yahoogroups.com> wrote:

>
>
> Rory,
>
> Try: justradios.com the site is a bit busy...but look at the
> capacitor line up...and look for the "Richey Golds," then go find your
> value(s).Terry-k9tw, has used them before...and says that the diameter is
> just slightly smaller than original...so use a piece of large diameter
> heatshrink..or similar
>
> Capacitors, Resistors and Schematics for Tube Radios / Electronics
> Specializes in high voltage Capacitors and Resistors for vintage tube
> radios / electronics. Also carries schemat...
> <http://www.justradios.com/>
>
>
> 73

> Joe wb7uqu
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>
> On Monday, February 6, 2017 5:03 PM, "Rory n6oil@...
> [TS-520_820_530_830]" <TS-520_820_530_830@yahoogroups.com> wrote:
>
>
>
>
> Looking for the vendor that has the correct 3 lead caps for the screen and
> driver. I think Glen had source but I can't find the post.
>
> Thanks
>
> N6OIL

>
>
>
>

56454. Re: SDR Panadapter for TS-830s

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-07 08:22:58 UTC
From: Craig Robinson
Topic: 56439 Message: 56454

Yes, have done that using the cheap and nasty RTL dongle.

Works great but can be confusing if you're listening via the PC (to take advantage of the DSP) ....

Habit makes you click on a signal ...... which you then hear perfectly but they never answer your calls :-(

Until you realise that without CAT your TS830 is transmitting somewhere else on the band.

But at least it works ;-)

73

Craig
EI3FW

56455. Re: VE3PVS Re-Cap Kit

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-07 16:54:34 UTC
From: k2dfc@...
Topic: 56440 Message: 56455

Is K4EAA still selling parts? His web site hasn't been updated in a few years and his last message was he was no longer doing repairs. Don't know if parts offered and prices are up to date.
Fred K2DFC

---In TS-520_820_530_830@yahoogroups.com, <scottandalene@...> wrote :

Hi Fred,

Personally I would only replace the HV caps and the screen and driver caps, unless there is a reason to replace any others. These kits are available from K4EAA:

http://www.k4eaa.com/parts.htm http://www.k4eaa.com/parts.htm

The reason I would not try to replace all the caps is because you will have to lift all of the boards which could cause damage.

Just my opinion-others may not agree.

Enjoy your TS-520!

73s, Scott, N6CIC

56456. TS-530SP Ext. VFO Jumper

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-07 16:57:01 UTC
From: spooky1369
Topic: 56456 Message: 56456

Howdy....It seems the jumper wire did not make it home with the rig.I hear pin #8 to #9 .Only 8 on my DIN socket ?HELP !!!!! I will order correct plug !
73's Kelly KF5DDA

Sent from my Verizon, Samsung Galaxy smartphone

56457. Re: [TS-520_820_530_830] Re: VE3PVS Re-Cap Kit

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-07 18:44:36 UTC
From: Joseph Stiles
Topic: 56440 Message: 56457

Fred,
Ken-k4eaa is still selling parts listed on his web site, unless otherwise noted.Ken decided a few years ago to stop repairing rigs due to some medical issues.I have bought many parts from Ken(and still do).
 73
Joe wb7uqu

On Tuesday, February 7, 2017 10:39 AM, "k2dfc@... [TS-520_820_530_830]" <TS-520_820_530_830@yahoogroups.com> wrote:

  Is K4EAA still selling parts? His web site hasn't been updated in a few years and his last message was he was no longer doing repairs. Don't know if parts offered and prices are up to date.
Fred K2DFC

---In TS-520_820_530_830@yahoogroups.com, <scottandalene@...> wrote :

Hi Fred,
Personally I would only replace the HV caps and the screen and driver caps, unless there is a reason to replace any others. These kits are available from K4EAA:
http://www.k4eaa.com/parts.htm
The reason I would not try to replace all the caps is because you will have to lift all of the boards which could cause damage.
Just my opinion-others may not agree.
Enjoy your TS-520!
73s, Scott, N6CIC

56458. Re: [TS-520_820_530_830] TS-530SP Ext. VFO Jumper

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-07 18:47:59 UTC
From: Joseph Stiles
Topic: 56456 Message: 56458

Kelly,
  You do NOT need a "vfo jumper" on the 530 series. The "vfo jumper" plug isonly applicable to the 520 & 820 series.
 73
Joe wb7uqu

On Tuesday, February 7, 2017 10:41 AM, "spooky1369 spooky1369@...m [TS-520_820_530_830]" <TS-520_820_530_830@yahoogroups.com> wrote:

  Howdy....It seems the jumper wire did not make it home with the rig.I hear pin #8 to #9 .Only 8 on my DIN socket ?HELP !!!!!   I will order correct plug !
73's Kelly KF5DDA

Sent from my Verizon, Samsung Galaxy smartphone

56459. Re: [TS-520_820_530_830] Re: VE3PVS Re-Cap Kit

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-07 19:19:28 UTC
From: pmarkavage@...
Topic: 56440 Message: 56459

You can also get Kenwood Hybrid parts from here:
http://www.hybridrestore.com/parts/ http://www.hybridrestore.com/parts/
Pete, wa2cwa

---In TS-520_820_530_830@yahoogroups.com, <stilesjoseph@...> wrote :

On Tuesday, February 7, 2017 10:39 AM, "k2dfc@... [TS-520_820_530_830]"
<TS-520_820_530_830@yahoogroups.com> wrote:

Is K4EAA still selling parts? His web site hasn't been updated in a few years and his last message was he was no longer doing repairs. Don't know if parts offered and prices are up to date.
Fred K2DFC

56460. Re: TS-520 issues

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-08 03:08:31 UTC
From: kk6fut@...
Topic: 56451 Message: 56460

Mike,

The issues you are seeing are due to dirty band switch and/or other contacts. A little time with some DeOxit and/or Triflow (apply both sparingly using a toothpick if you can -- they go a long way -- and try not to get any on the wafers themselves) will restore your radio back to full condition. You might also need to apply a drop in the potentiometers, too. Put some triflow/deoxit on each contact, work the switch back and forth a few times, repeat, and it should come back to life pretty quickly.

In 90% of the cases your symptoms are just a little age and corrosion on the contacts, nothing else.

Good luck!

Ben
KK6FUT

56461. Re: VE3PVS Re-Cap Kit

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-07 20:37:29 UTC
From: bob royston
Topic: 56440 Message: 56461

As of last year, he was.. I ordered relay board and relays from him..N4VNL/Bob

Bob Royston

56462. Re: [TS-520_820_530_830] TS-530SP Ext. VFO Jumper

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-08 00:16:20 UTC
From: spooky1369@...
Topic: 56456 Message: 56462

Thank You !
It had one on there for some reason.
So... You believe it's OK to Power Up ?

56463. Re: TS-520 issues

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-08 03:18:34 UTC
From: km4vox@...
Topic: 56451 Message: 56463

Thanks so much Ben I will certainly give it a try. I appreciate the advice so much.

Mike Mathis KM4VOX

56464. Re: [TS-520_820_530_830] Re: VE3PVS Re-Cap Kit

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-07 19:48:19 UTC
From: k2dfc@...
Topic: 56440 Message: 56464

Thanks to everyone who replied. The info was helpful and very much appreciated.
Fred K2DFC

---In TS-520_820_530_830@yahoogroups.com, <pmarkavage@...> wrote :

You can also get Kenwood Hybrid parts from here:
http://www.hybridrestore.com/parts/ http://www.hybridrestore.com/parts/
Pete, wa2cwa

---In TS-520_820_530_830@yahoogroups.com, <stilesjoseph@...> wrote :

On Tuesday, February 7, 2017 10:39 AM, "k2dfc@... [TS-520_820_530_830]"
<TS-520_820_530_830@yahoogroups.com> wrote:

Is K4EAA still selling parts? His web site hasn't been updated in a few years and his last message was he was no longer doing repairs. Don't know if parts offered and prices are up to date.
Fred K2DFC

56465. Re: [TS-520_820_530_830] TS-530SP Ext. VFO Jumper

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-08 04:30:21 UTC
From: Joseph Stiles
Topic: 56456 Message: 56465

Kelly, I see no reason why you should not.. just remove the plug first.
 73
Joe wb7uqu

On Tuesday, February 7, 2017 8:24 PM, "spooky1369@... [TS-520_820_530_830]" <TS-520_820_530_830@yahoogroups.com> wrote:

  Thank You !
It had one on there for some reason.
So... You believe it's OK to Power Up ?

56466. Re: [TS-520_820_530_830] TS-530SP Ext. VFO Jumper

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-08 13:06:27 UTC
From: w5rkl@...
Topic: 56456 Message: 56466

There is no requirement nor any reference to insert a "jumper plug" into the TS-530 rear panel remote VFO DIN socket when a remote VFO is not connected to the TS-530.

I would recommend the operator spend some time reading/studying the TS-530 operators manual. If questions still arise then come here and ask for additional help.

The TS-530 operator and service manuals can be downloaded from my website by clicking on the following links:

TS-530 operator manual:
http://w5rkl.com/wp-content/uploads/2014/04/Kenwood-TS-530SP-manual.pdf
http://w5rkl.com/wp-content/uploads/2014/04/Kenwood-TS-530SP-manual.pdf

TS-530 service manual:
http://w5rkl.com/wp-content/uploads/2014/04/TS-530S_Service.pdf
http://w5rkl.com/wp-content/uploads/2014/04/TS-530S_Service.pdf

73
Mike W5RKL
www.w5rkl.com http://www.w5rkl.com

56467. Re: [TS-520_820_530_830] TS-530SP Ext. VFO Jumper

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-08 04:57:15 UTC
From: Kelly
Topic: 56456 Message: 56467

Thank You again for all your Help Joe !

Kelly
KF5DDA

On Feb 7, 2017 22:30, "Joseph Stiles stilesjoseph@yahoo.com [TS-520_820_530_830]"
<TS-520_820_530_830@yahoogroups.com> wrote:

Kelly, I see no reason why you should not.. just remove the plug first.

73
Joe wb7uqu

On Tuesday, February 7, 2017 8:24 PM, "spooky1369@yahoo.com [TS-520_820_530_830]"
<TS-520_820_530_830@yahoogroups.com> wrote:

Thank You !
It had one on there for some reason.
So... You believe it's OK to Power Up ?

56468. TS-830S

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-08 15:37:26 UTC
From: redondotom@...
Topic: 350 Message: 56468

Hi All, I have 2 things I need help with. First I have a Kenwood TS-830S. I need to reduce the output power to 60 watts for my Solid State Amp input. The amp is a Metron 1000B. Second, I need the cable for the External VFO-230. Thanks, Tom KK6BD

56469. Re: [TS-520_820_530_830] TS-830S

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-08 16:39:50 UTC
From: Joseph Stiles
Topic: 350 Message: 56469

Tom,
  Go to the "files" area through the group main page(it's the one with the nice Kenwood station. Click on "files," scroll down until you find: Kenwood Hybrid QRP Circuit done by Mike-w5rkl it's a PDF
The remote VFO interconnecting cable can be had at either: k4eaa.com or hybridrestore.com 73
Joe wb7uqu

On Wednesday, February 8, 2017 8:32 AM, "redondotom@... [TS-520_820_530_830]" <TS-520_820_530_830@yahoogroups.com> wrote:

  Hi All, I have 2 things I need help with. First I have a Kenwood TS-830S. I need to reduce the output power to 60 watts for my Solid State Amp input. The amp is a Metron 1000B. Second, I need the cable for the External VFO-230. Thanks, Tom KK6BD

56470. Re: [TS-520_820_530_830] TS-830S

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-08 16:51:55 UTC
From: Rodger Hough
Topic: 350 Message: 56470

Tom:

A 2 to 3 db pad between the KW and the amp will do the job. Go to the ARRL site and look up an article by Phil Salas AD5X. Type in in-line attenuator. I've built two of them and they work great. Using one between by TS-520SE and a SB-1000 that only need 60 watts or less for drive.

73 Rodger K1HH
> On Feb 8, 2017, at 11:39 AM, Joseph Stiles stilesjoseph@yahoo.com [TS-520_820_530_830] <TS-520_820_530_830@yahoogroups.com> wrote:
>
>

> Tom,
>
> Go to the "files" area through the group main page(it's the one with the nice Kenwood station. Click on "files," scroll down until you find: Kenwood Hybrid QRP Circuit done by Mike-w5rkl it's a PDF
>
> The remote VFO interconnecting cable can be had at either: k4eaa.com <http://k4eaa.com/> or hybridrestore.com <http://hybridrestore.com/>
>
> 73
> Joe wb7uqu
>
>
> On Wednesday, February 8, 2017 8:32 AM, "redondotom@... <mailto:redondotom@...> [TS-520_820_530_830]" <TS-520_820_530_830@yahoogroups.com <mailto:TS-520_820_530_830@yahoogroups.com>> wrote:
>
>
>
> Hi All, I have 2 things I need help with. First I have a Kenwood TS-830S. I need to reduce the output power to 60 watts for my Solid State Amp input. The amp is a Metron 1000B. Second, I need the cable for the External VFO-230. Thanks, Tom KK6BD
>
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>

56471. RE: [TS-520_820_530_830] TS-830S

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-08 20:35:26 UTC
From: David Boothe
Topic: 350 Message: 56471

I also built a relay-controlled AD5X 2 dB pad and use it between all my 100W rigs and my ALS-600 amp to avoid over-driving it. Easy build and works like a dream.

Dave K3DWB

-----Original Message-----
From: TS-520_820_530_830@yahoogroups.com
[mailto:TS-520_820_530_830@yahoogroups.com]
Sent: Wednesday, February 08, 2017 11:52 AM
To: TS-520_820_530_830@yahoogroups.com
Subject: Re: [TS-520_820_530_830] TS-830S

Tom:

A 2 to 3 db pad between the KW and the amp will do the job. Go to the ARRL site and look up an article by Phil Salas AD5X. Type in in-line attenuator. I've built two of them and they work great. Using one between by TS-520SE and a SB-1000 that only need 60 watts or less for drive.

73 Rodger K1HH

On Feb 8, 2017, at 11:39 AM, Joseph Stiles stilesjoseph@...
[TS-520_820_530_830] <TS-520_820_530_830@yahoogroups.com> wrote:

Tom,

Go to the "files" area through the group main page(it's the one with the nice Kenwood station. Click on "files," scroll down until you find: Kenwood Hybrid QRP Circuit done by Mike-w5rkl it's a PDF

The remote VFO interconnecting cable can be had at either: k4eaa.com <http://k4eaa.com/> or hybridrestore.com <http://hybridrestore.com/>

73
Joe wb7uqu

On Wednesday, February 8, 2017 8:32 AM, "redondotom@...
[TS-520_820_530_830]" <TS-520_820_530_830@yahoogroups.com> wrote:

Hi All, I have 2 things I need help with. First I have a Kenwood TS-830S. I need to reduce the output power to 60 watts for my Solid State Amp input. The amp is a Metron 1000B. Second, I need the cable for the External VFO-230. Thanks, Tom KK6BD

56472. Re: [TS-520_820_530_830] VE3PVS Re-Cap Kit

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-09 00:59:38 UTC
From: Joe Reed
Topic: 56440 Message: 56472

I little over a year ago a bought a couple of driver tubes, couplers, and lamps. But if in doubt send an email, the address is on the website.

Joe N9JR

> On Feb 7, 2017, at 10:54 AM, k2dfc@... [TS-520_820_530_830] <TS-520_820_530_830@yahoogroups.com> wrote:
>
> Is K4EAA still selling parts? His web site hasn't been updated in a few years and his last message was he was no longer doing repairs. Don't know if parts offered and prices are up to date.
> Fred K2DFC
>

56473. Re: [TS-520_820_530_830] VE3PVS Re-Cap Kit

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-09 20:17:18 UTC
From: ka4aqm
Topic: 56440 Message: 56473

Ken is a very busy man and he gets a lot of emails. One of the best ways to get his attention if you need just parts is to put it in the SUBJECT line of your email. I have used "Parts Please" in my previous emails and he answers them in a day or 2 at the most...just saying.

Randy

KA4AQM

On 2/8/17 7:59 PM, Joe Reed joe@... [TS-520_820_530_830] wrote:
>
> I little over a year ago a bought a couple of driver tubes, couplers,
> and lamps. But if in doubt send an email, the address is on the website.
>
>
> Joe N9JR
>
>> On Feb 7, 2017, at 10:54 AM, k2dfc@... <mailto:k2dfc@...>
>> [TS-520_820_530_830] <TS-520_820_530_830@yahoogroups.com
>> <mailto:TS-520_820_530_830@yahoogroups.com>> wrote:
>>
>> Is K4EAA still selling parts? His web site hasn't been updated in a
>> few years and his last message was he was no longer doing repairs.
>> Don't know if parts offered and prices are up to date.
>> Fred K2DFC
>>
>
>

56474. Re: [TS-520_820_530_830] VE3PVS Re-Cap Kit

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-09 22:29:43 UTC
From: wagstw46@...
Topic: 56440 Message: 56474

There is no reason to email Ken for parts.

He has a website and you simply order on the site.

Barb his wife helps monitor the site and orders are promptly filled.

Terry K9TW

56475. RE: [TS-520_820_530_830] VE3PVS Re-Cap Kit

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-09 22:47:33 UTC
From: David Boothe
Topic: 56440 Message: 56475

Never had a problem ordering from Ken via his website.

Dave K3DWB

-----Original Message-----
From: TS-520_820_530_830@yahoogroups.com
[mailto:TS-520_820_530_830@yahoogroups.com]
Sent: Thursday, February 09, 2017 5:30 PM
To: TS-520_820_530_830@yahoogroups.com
Subject: Re: [TS-520_820_530_830] VE3PVS Re-Cap Kit

There is no reason to email Ken for parts.

He has a website and you simply order on the site.

Barb his wife helps monitor the site and orders are promptly filled.

Terry K9TW

56476. RE: [TS-520_820_530_830] VE3PVS Re-Cap Kit

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-10 00:27:20 UTC
From: croberts@...
Topic: 56440 Message: 56476

I've purchase a lot in the past months. Great guy. But be aware that he is out of the DG-5 power and data cables! I needed a set, dang.

Chuck
N2KWO

56477. Re: VE3PVS Re-Cap Kit

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-10 04:07:18 UTC
From: T. Scott Griffin
Topic: 56440 Message: 56477

I bought the blown-up TS-830s schematic from him just a few weeks ago.

Scott N6CIC

Sent from my Verizon, Samsung Galaxy smartphone

56478. Re: [TS-520_820_530_830] Capacitor vendor

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-07 15:30:47 UTC
From: Jan Servaites
Topic: 56448 Message: 56478

If those are the dual 22uf caps, I recommend the F&T brand, dual 33uf/450v and are the correct 25mm diameter & length. I lectured at the Hybrid forum in Dayton about rebuilding a 599-Twin and mentioned using these caps.
One can find them here:
https://www.tubesandmore.com/products/capacitor-ft-450v-3333-f-electrolytic
Jan N8CBX

On 2/6/2017 11:45 PM, Joseph Stiles stilesjoseph@...
[TS-520_820_530_830] wrote:
> Rory,
>
> Try: justradios.com the site is a bit busy...but look at the
> capacitor line up...and look for the "Richey Golds," then go find
> your value(s).Terry-k9tw, has used them before...and says that the
> diameter is just slightly smaller than original...so use a piece of
> large diameter heatshrink..or similar
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> Capacitors, Resistors and Schematics for Tube Radios / Electronics
>
> Specializes in high voltage Capacitors and Resistors for vintage tube
> radios / electronics. Also carries schemat...
>
>
> <http://www.justradios.com/>
>
> 73
> Joe wb7uqu
>
>
>
>
> On Monday, February 6, 2017 5:03 PM, "Rory n6oil@...
> [TS-520_820_530_830]" <TS-520_820_530_830@yahoogroups.com> wrote:
>
>
> Looking for the vendor that has the correct 3 lead caps for the screen
> and driver. I think Glen had source but I can't find the post.

>
> Thanks
>
> N6OIL
>
>
>

56479. How do I test the Rx of a just acquired TS-830s?

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-10 05:15:51 UTC
From: ashoks@...
Topic: 56479 Message: 56479

Hello everyone! I just joined this group and am looking forward to being part of the discussions and hopefully contribute. I got my tech license a month ago and am working towards my general. My main interest is DX HF.

I just purchased a very clean looking TS-830s from a local HAM for getting acquainted (Rx only of course). He said the rig works fine and it does receiver a few stations on 40m and sometimes 20m but not much else, using an attic mounted 20m antenna or a long wire outside.I realize the band conditions are not great and my antenna is not great, but would've expected to hear more stations. Also, I notice that I have to keep changing the drive control to get a good s-meter reading as a scan across a band.

Other than going through a full alignment, is there a way to just check the Rx on all bands - e.g. using the 25kHz marker?

73
Ashok
KM6HMW

56480. TS-830S and accessories for sale

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-10 01:42:38 UTC
From: aschichler .
Topic: 56480 Message: 56480

I was planning on putting the following items up for sale on eBay, but decided to give the members of this group first crack at it:

I am selling my *TS-830S* which is in exceptional cosmetic and operational condition for $499 plus shipping costs. You don’t see very many of these transceivers in this nice shape with hardly any scratches or other defects. I have several pictures available upon request. It is still in good alignment and calibration and ready to put on the air. It comes with a money-back guarantee if returned within 10 days.

It comes with the original manual.

(I also have the service manual which I will sell separately if anyone is interested.)

I also have an *MC-50 microphone *for sale that is in beautiful shape that looks practically brand-new and works great for $75 plus shipping.

I am also selling a *VFO-240* which is in very nice shape and includes the original manual and interconnection cable for $125 plus shipping.

Last but not least, I am selling a nice *SP-230* speaker for $120 plus shipping. Works great and looks very nice with just minor blemishes.

All items above come with a money-back guarantee. (just pay return shipping).

I have many pictures from all angles of all the above equipment, so just

let me know and I will send them to you.

Please contact me if interested at schichler@... or 585-260-7069.

Thanks,

Al, WA2S

56481. RE: [TS-520_820_530_830] How do I test the Rx of a just acquired TS-830s?

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-10 20:17:01 UTC
From: David Boothe
Topic: 56479 Message: 56481

Ashok,

Welcome to ham radio and to the group. The TS-830S is an excellent rig and you will enjoy operating it.

It is normal to need to vary the DRIVE control as you tune across the band. This control acts as a preselector for both the transmitter and the receiver and, when aligned correctly, peaks the RF driver circuit concurrent with the receiver sensitivity for any given frequency. As you tune across any band, you vary this control when tuning to get maximum receiver sensitivity and peak output from the RF driver circuit into the final amplifier.

The bands aren't great right now, but you should be able to receive signals, especially on 40 meters and 80 meters and a few on 20, depending on your antenna and the time of day. You can use the marker to check receiver sensitivity on all bands. Turn the MIC control fully CCW to CAL ON to engage the marker and tune the VFO to get the signal at 25 kHz intervals. Tune for max signal level on the meter with the VFO, then peak the signal by adjusting DRIVE. You should be able to get around S9 or so on the low bands and that or maybe a little less on the high bands. If the signals are at this level, your receiver is likely OK.

Another thing you will want to get is a dummy load, best with a watt meter for tuning up the transmitter to resonance before you put the output into an antenna. You can practice tuning up (per the manual instructions) into the dummy load without sending out a signal. There are good instructive videos on Youtube for tuning up the 830S, as well as several good tutorials on the various Kenwood hybrid websites (try the Kenwood section of the WB4HFN website or W5RKL). I use a combination antenna tuner/wattmeter/dummy load to tune my hybrids (MFJ-949E) and it works very well.

Good luck with the new radio and enjoy the hobby!

Dave K3DWB

-----Original Message-----
From: TS-520_820_530_830@yahoogroups.com
[mailto:TS-520_820_530_830@yahoogroups.com]
Sent: Friday, February 10, 2017 12:16 AM
To: TS-520_820_530_830@yahoogroups.com
Subject: [TS-520_820_530_830] How do I test the Rx of a just acquired TS-830s?

Hello everyone! I just joined this group and am looking forward to being part of the discussions and hopefully contribute. I got my tech license a

month ago and am working towards my general. My main interest is DX HF.

I just purchased a very clean looking TS-830s from a local HAM for getting acquainted (Rx only of course). He said the rig works fine and it does receiver a few stations on 40m and sometimes 20m but not much else, using an attic mounted 20m antenna or a long wire outside.I realize the band conditions are not great and my antenna is not great, but would've expected to hear more stations. Also, I notice that I have to keep changing the drive control to get a good s-meter reading as a scan across a band.

Other than going through a full alignment, is there a way to just check the Rx on all bands - e.g. using the 25kHz marker?

73

Ashok

KM6HMW

56482. Re: TS-520 issues

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-11 15:50:32 UTC
From: km4vox@...
Topic: 56451 Message: 56482

Update: used the deoxite and got the radio to tune up now. Still have the problem with the receive being low and S signal not working. Receive came back on for about 3 hours a signal meter worked like a champ. Then back out again lol. Any way I want to thank you and everyone that replied for the help and advice.
73s Mike Mathis KM4VOX

56483. Delay un-keyeing and keying when swithing USB/LSB

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-11 05:01:49 UTC
From: croberts@...
Topic: 56483 Message: 56483

I hope someone has seen this issue.

I purchased a TS-530SP and was hoping that it was going to be the one radio that I didn't have to tear down to find problems, so I'm trying to find out if it IS an issue or something that was a MOD to allow a power amp to cycle after un-keying.

The first thing that I noticed was that when un-keyed it takes about 1.5 seconds to actually stop sending. People in QSO's will start talking before the radio had switched over. I thought it was just a stuck relay but then I noticed the other issue.

When switching from USB/LSB the radio keys for the same delay. Both ways, USB to LSB and LSB to USB. And jiggling the switch causes the same keying for about 1.5 seconds.

Switching to CW and TUNE does not have the issue. But coming from CW to USB does.

Otherwise the rig is clean and works well.

Any experience with this type of behavior would be greatly appreciated! I'll starting to follow the schematic but that could take a lot of time to come up with theory that then I would have to test.

Thanks
Chuck
N2KWO

56484. TV 502 with TS520

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-11 05:26:13 UTC
From: kk.n8vkx@...
Topic: 56484 Message: 56484

I just received a TV 502 to use with my TS 520, It transmit fine and is on frequency, but is deafer than a door nail. It has (I believe) an aftermarket single transistor pre-amp installed. Has anyone messed with this piece of equipment?

N8KVX

F.Y.I. - Remember to sign/end all posts with you callsign (I added the callsign to this message)

73,
Ellen - AF9J
Group Moderator

56485. Re: [TS-520_820_530_830] Delay un-keyeing and keying when swithing USB/LSB

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-11 17:36:03 UTC
From: David Boothe
Topic: 56483 Message: 56485

Is the VOX switched on?
Dave K3DWB

Sent from my iPhone

> On Feb 11, 2017, at 12:01 AM, croberts@... [TS-520_820_530_830] <TS-520_820_530_830@yahoogroups.com> wrote:
>
> I hope someone has seen this issue.
>
> I purchased a TS-530SP and was hoping that it was going to be the one radio that I didn't have to tear down to find problems, so I'm trying to find out if it IS an issue or something that was a MOD to allow a power amp to cycle after un-keying.
>
> The first thing that I noticed was that when un-keyed it takes about 1.5 seconds to actually stop sending. People in QSO's will start talking before the radio had switched over. I thought it was just a stuck relay but then I noticed the other issue.
>
> When switching from USB/LSB the radio keys for the same delay. Both ways, USB to LSB and LSB to USB. And jiggling the switch causes the same keying for about 1.5 seconds.
>
> Switching to CW and TUNE does not have the issue. But coming from CW to USB does.
>
> Otherwise the rig is clean and works well.
>
> Any experience with this type of behavior would be greatly appreciated! I'll starting to follow the schematic but that could take a lot of time to come up with theory that then I would have to test.
>
> Thanks
> Chuck
> N2KWO
>
>
>
>

56486. Re: Delay un-keyeing and keying when swithing USB/LSB

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-11 17:54:01 UTC
From: K Campion
Topic: 56483 Message: 56486

Sounds like you're in VOX mode.

Kevin - N2FLP

56487. Re: [TS-520_820_530_830] TV 502 with TS520

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-11 18:21:18 UTC
From: R Oler
Topic: 56484 Message: 56487

Hello

I got my TV502 and 6 about oh three years after I got my 520 which was many decades ago. one of the first things I did was work up a MF 102 preamp for both...nothing special here it was right out of the ARRL Handbook of the era.

it works (to this day) great... Robert WB5MZO and WB5MZO/TA1 soon to be TA1THY :)

_____
From: TS-520_820_530_830@yahoogroups.com <TS-520_820_530_830@yahoogroups.com> on behalf of kk.n8vkx@... [TS-520_820_530_830] <TS-520_820_530_830@yahoogroups.com>
Sent: Friday, February 10, 2017 8:26 PM
To: TS-520_820_530_830@...m
Subject: [TS-520_820_530_830] TV 502 with TS520

I just received a TV 502 to use with my TS 520, It transmit fine and is on frequency, but is deafer than a door nail. It has (I believe) an aftermarket single transistor pre-amp installed. Has anyone messed with this piece of equipment?

N8KVX

F.Y.I. - Remember to sign/end all posts with you callsign (I added the callsign to this message)

73,

Ellen - AF9J

Group Moderator

56488. Re: Delay un-keyeing and keying when swithing USB/LSB

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-11 18:28:27 UTC
From: croberts@...
Topic: 56483 Message: 56488

Oh DOH!!!

I never use VOX and, being a new (used) radio it was left on.

Thanks all. (very embarrassed).

Chuck
N2KWO

56489. Re: [TS-520_820_530_830] Delay un-keyeing and keying when swithing USB/LSB

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-11 18:33:33 UTC
From: Lou Everett, Sr.
Topic: 56483 Message: 56489

Are you using VOX?

Lou Everett, Sr., WA5LOU

ARRL Official Observer Coordinator, Indiana Section

On Sat, Feb 11, 2017 at 12:01 AM, croberts@sagamorewoods.com mailto:croberts@sagamorewoods.com [TS-520_820_530_830] <TS-520_820_530_830@yahoogroups.com mailto:TS-520_820_530_830@yahoogroups.com> wrote:
I hope someone has seen this issue.

I purchased a TS-530SP and was hoping that it was going to be the one radio that I didn't have to tear down to find problems, so I'm trying to find out if it IS an issue or something that was a MOD to allow a power amp to cycle after un-keying.

The first thing that I noticed was that when un-keyed it takes about 1.5 seconds to actually stop sending. People in QSO's will start talking before the radio had switched over. I thought it was just a stuck relay but then I noticed the other issue.

When switching from USB/LSB the radio keys for the same delay. Both ways, USB to LSB and LSB to USB. And jiggling the switch causes the same keying for about 1.5 seconds.

Switching to CW and TUNE does not have the issue. But coming from CW to USB does.

Otherwise the rig is clean and works well.

Any experience with this type of behavior would be greatly appreciated! I'll starting to follow the schematic but that could take a lot of time to come up with theory that then I would have to test.

Thanks
Chuck
N2KWO

56490. Re: Delay un-keyeing and keying when swithing USB/LSB

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-11 18:59:18 UTC
From: croberts@...
Topic: 56483 Message: 56490

I guess on the high side I did find a nice, clean, fully operational TS-530SP. The nylon coupler is going but the brass coupler has been ordered already.

I have 2 TS-520S's that I am repairing, or other wise fixing, and one TS-530S that is close to being ready to sell (now that I found this TS-530SP).

eBay finds are now 1 out of 4. Not bad is you are playing baseball.

Chuck
N2KWO

56491. Re: Delay un-keyeing and keying when swithing USB/LSB

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-11 23:03:39 UTC
From: K Campion
Topic: 56483 Message: 56491

No worries. Anyone could make that mistake, especially with a radio that's new to you. It's cool that the fix was so easy.

Good Luck with it,
Kevin - N2FLP

56492. RE: [TS-520_820_530_830] Re: Delay un-keyeing and keying when swithing USB/LSB

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-11 23:46:19 UTC
From: David Boothe
Topic: 56483 Message: 56492

It is definitely not the first time that has happened. I had the same 'issue' with my 830S when I first got it, so don't feel too bad!

Enjoy the radio.

Dave K3DWB

-----Original Message-----
From: TS-520_820_530_830@yahoogroups.com
[mailto:TS-520_820_530_830@yahoogroups.com]
Sent: Saturday, February 11, 2017 6:04 PM
To: TS-520_820_530_830@yahoogroups.com
Subject: [TS-520_820_530_830] Re: Delay un-keyeing and keying when swithing USB/LSB

No worries. Anyone could make that mistake, especially with a radio that's new to you. It's cool that the fix was so easy.

Good Luck with it,

Kevin - N2FLP

56493. TS-520 Gradual XMIT Problem

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-11 23:13:37 UTC
From: dllewiszz@...
Topic: 56493 Message: 56493

Over a period of a few weeks my rig became sluggish at the start of every transmission. On SSB the first few words would barely move the needle, then it would slowly increase to normal output. On digital modes I'd have to crank up the input level for the first 10 seconds of a xmsn, then finally bring it back to normal. The problem has gotten worse and worse so the rig now takes a long time on each xmsn to produce normal output. On CW, I have to hold the key down and crank up the carrier level for 10 - 15 seconds, then I can deliver a normal transmission - until I let it drop for 3 or 4 seconds, then I've lost it and have to start over again.

I have a couple of new driver tubes handy, so I replaced it, and no joy. Still the same. I swapped the 6146s from one socket to the other (no good reason, I know) and this doesn't help. No spare 6146s handy.

What is the usual suspect in this situation? As you might expect, idle current is very very low until things "warm-up" and get to normal on each transmission.

Where should I start looking?

Thanks and 73,

Dave WA4FXT

56494. Re: [TS-520_820_530_830] Re: Delay un-keyeing and keying when swithing USB/LSB

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-11 23:55:42 UTC
From: Lou Everett, Sr.
Topic: 56483 Message: 56494

Don't be embarrassed. Many of us old timers have done the same thing.

73 and God Bless!

Lou Everett, Sr., WA5LOU

On Sat, Feb 11, 2017 at 1:28 PM, croberts@...
[TS-520_820_530_830] <TS-520_820_530_830@yahoogroups.com> wrote:

>
>
> Oh DOH!!!
>
> I never use VOX and, being a new (used) radio it was left on.
>
> Thanks all. (very embarrassed).
>
> Chuck
> N2KWO
>
>

56495. Re: [TS-520_820_530_830] Re: Delay un-keyeing and keying when swithing USB/LSB

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-12 17:13:26 UTC
From: John Davidson
Topic: 56483 Message: 56495

I usually use the VOX system on CW to T/R switch on my rigs, It is set for a short delay. I never have used VOX on fone, but I rarely get on fone. I have not used manual T/R on CW in many decades :D On a noisy band the background noise, when I do use Break/in, drives me NUTZ ! On special occasions, or on a quite band, I will use Break/in now and then. My radio is Ham Radio...CW is Real Radio 73, John...K8JD

From: "'Lou Everett, Sr.' loueverettsr@... [TS-520_820_530_830]"
<TS-520_820_530_830@yahoogroups.com>
To: TS-520_820_530_830@yahoogroups.com
Sent: Saturday, February 11, 2017 6:55 PM
Subject: Re: [TS-520_820_530_830] Re: Delay un-keyeing and keying when swithing USB/LSB

  Don't be embarrassed. Many of us old timers have done the same thing.

73 and God Bless!

Lou Everett, Sr., WA5LOU

On Sat, Feb 11, 2017 at 1:28 PM, croberts@... [TS-520_820_530_830]
<TS-520_820_530_830@yahoogroups.com> wrote:

  Oh DOH!!!

  I never use VOX and, being a new (used) radio it was left on.

 Thanks all. (very embarrassed).

Chuck
N2KWO

56496. Re: [TS-520_820_530_830] TV 502 with TS520

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-12 17:20:05 UTC
From: John Davidson
Topic: 56484 Message: 56496

Kenwood Deaf Classic VHF RigsI got either a Kenwood 6M or 2M transverter for My TS520 when it was still pretty new, (That was a long time ago :D) And I found it was pretty deaf , really disappointing. But before I could take it apart and stick a preamp in it some visitor to the shack wanted to buy it . I later got a TS700a, also kind of deaf on FM and I finally put a FET preamp in it. My radio is Ham Radio...CW is Real Radio 73, John...K8JD

From: "R Oler orbitjet@... [TS-520_820_530_830]" <TS-520_820_530_830@yahoogroups.com>
To: "TS-520_820_530_830@yahoogroups.com" <TS-520_820_530_830@yahoogroups.com>
Sent: Saturday, February 11, 2017 1:21 PM
Subject: Re: [TS-520_820_530_830] TV 502 with TS520

Hello

I got my TV502 and 6 about oh three years after I got my 520 which was many decades ago. one of the first things I did was work up a MF 102 preamp for both...nothing special here it was right out of the ARRL Handbook of the era.

it works (to this day) great... Robert WB5MZO and WB5MZO/TA1 soon to be TA1THY :)

From: TS-520_820_530_830@...m <TS-520_820_530_830@yahoogroups.com> on behalf of kk.n8vkx@... [TS-520_820_530_830] <TS-520_820_530_830@yahoogroups.com>
Sent: Friday, February 10, 2017 8:26 PM
To: TS-520_820_530_830@yahoogroups.com
Subject: [TS-520_820_530_830] TV 502 with TS520 I just received a TV 502 to use with my TS 520, It transmit fine and is on frequency, but is deafer than a door nail. It has (I believe) an aftermarket single transistor pre-amp installed. Has anyone messed with this piece of equipment?

N8KVX

F.Y.I. - Remember to sign/end all posts with you callsign (I added the callsign to this message)
73,Ellen - AF9JGroup Moderator

56497. Re: [TS-520_820_530_830] Re: Delay un-keyeing and keying when swithing USB/LSB

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-12 18:06:18 UTC
From: John Davidson
Topic: 56483 Message: 56497

I am ashamed that when I see someone type QUITE for QUIET I grin. Now I DID IT ! My radio is Ham Radio...CW is Real Radio 73, John...K8JD

From: "John Davidson k8jd@... [TS-520_820_530_830]" <TS-520_820_530_830@yahoogroups.com>
To: "TS-520_820_530_830@yahoogroups.com" <TS-520_820_530_830@yahoogroups.com>
Sent: Sunday, February 12, 2017 12:13 PM
Subject: Re: [TS-520_820_530_830] Re: Delay un-keyeing and keying when swithing USB/LSB

  IOn special occasions, or on a quite band, I will use Break/in now and then. My radio is Ham Radio...CW is Real Radio 73, John...K8JD

56498. Re: [TS-520_820_530_830] How do I test the Rx of a just acquired TS-830s?

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-12 18:01:18 UTC
From: John Davidson
Topic: 56479 Message: 56498

Yes, Ashok, the conditions for DX are about the poorest you will find in the 11 year solar activity cycle. Other than putting up a tower and multiband Yagi, all I can say is have patience and spend a lot of time listening for DX.ALSO, You can do better on the lower frequencies than the usual "DX" bands like 10/15/20M but you need some high and long, carefully designed, antenna wires. My radio is Ham Radio...CW is Real Radio 73, John...K8JD

From: "ashoks@... [TS-520_820_530_830]" <TS-520_820_530_830@yahoogroups.com>
To: TS-520_820_530_830@yahoogroups.com
Sent: Friday, February 10, 2017 12:15 AM
Subject: [TS-520_820_530_830] How do I test the Rx of a just acquired TS-830s?

  Hello everyone! I just joined this group and am looking forward to being part of the discussions and hopefully contribute. I got my tech license a month ago and am working towards my general. My main interest is DX HF.
I just purchased a very clean looking TS-830s from a local HAM for getting acquainted (Rx only of course). He said the rig works fine and it does receiver a few stations on 40m and sometimes 20m but not much else, using an attic mounted 20m antenna or a long wire outside.I realize the band conditions are not great and my antenna is not great, but would've expected to hear more stations. AAshokKM6HMW

56499. Vintage Hybrid Net Update (February 12, 2017)

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-13 00:57:37 UTC
From: Mark Gilger
Topic: 56499 Message: 56499

Net Info:
Saturday: 7.235 ☐ 7.233 @ 3:30pm Eastern following the Swan Tech Net
Sunday: 14.316 @ 1800 UTC following the ICOM net

Web Site:
<http://www.wb4hfn.com/KENWOOD/KenwoodHomePage.htm>http://www.wb4hfn.com/KENWOOD/KenwoodHomePage.htm

The net started its existence on November 1st,
2011. The yearly check-in totals are posted at the bottom of this message.

The Saturday net was run by me, WB0IQK. There
were 26 stations checking in under GOOD band conditions.

We had the following number of radios checking in.
4 running TS-520(x)
4 running TS-530(x)
3 running TS-820(x)
7 running TS-830S
0 running TS-510
0 running TS-511
0 running TS-515
0 running 599 twins
0 running TS-900

I was running my TS-830S + Drake L4B amplifier.

The Sunday net was run by me, WB0IQK. There were
24 stations checking in under GOOD band conditions.

We had the following number of radios checking in.
1 running TS-520(x)
1 running TS-530(x)
0 running TS-820(x)
3 running TS-830S
0 running TS-510
0 running TS-511
0 running TS-515
0 running 599 twins
2 running TS-900

I was running my TS-830S + Drake L-4B amplifier.

We have been having several people checking in
regularly with their TS-430, TS-440, and
TS-940☐s, which of course is not a hybrid,
although over 30+ years old. Everyone is welcome

as long as they have an interest in the older equipment.

If anyone would be interested in filling in as a
net control station, please send me an email.
Currently it's just myself, Jimmy, WB2KNR, and
Greg, WQ0P . I would like to get several more. If
we do, we can alternate so everyone might be on a
3-4 week rotation. It's a lot of fun and a good
way to make sure you station is optimized.

For anyone that has not heard, we have a new web
site that WB4HFN is hosting. He currently has a
very nice site for Drake, Collins and Heathkit
and now Kenwood Hybrids. Good quality manuals
plus sale flyers and brochures will be found
here, along with user supplied information for all Hybrids.

His URL is:
<http://www.wb4hfn.com/KENWOOD/KenwoodHomePage.htm>http://www.wb4hfn.com/KENWOOD/KenwoodHo
mePage.htm

To date, we have had the following check-in:

Nov. 2011 ☐ Oct. 2012 Saturday total 754
check-ins, Sunday total 563 check-ins
Nov. 2012 - Oct. 2013 Saturdays total 828 check-ins, Sunday total 609 check-ins
Nov. 2013 - Oct. 2014 Saturdays total 842 check-ins, Sunday total 744 check-ins
Nov. 2014 ☐ Oct 2015 Saturdays total 962 check-ins, Sunday total 669 check-ins
Nov. 2015 ☐ Oct 2016 Saturdays total 807 check-ins, Sunday total 628 check-ins

November 2016, Saturday net total = 80, Sunday total = 68
December 2016, Saturday net total = 73, Sunday total = 69
January 2017, Saturday net total = 50, Sunday total = 90
February 2017, Saturday net total = 47, Sunday total = 32 (Month to date)

Net Info:
Saturday: 7.235 @ 3:30 Eastern following the Swan Tech Net
Sunday: 14.316 @ 1800 UTC following the ICOM net

Web Site:
<http://www.wb4hfn.com/KENWOOD/KenwoodHomePage.htm>http://www.wb4hfn.com/KENWOOD/KenwoodHo
mePage.htm

73's,
Mark, WB0IQK

56500. Re: [TS-520_820_530_830] How do I test the Rx of a just acquired TS-830s?

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-13 01:00:31 UTC
From: mgilger@...
Topic: 56479 Message: 56500

You can turn the calibrator on, peak the preselector and you should see greater than S7-S9 on most of the bands.

Mark, WB0IQK

56501. Re: [TS-520_820_530_830] How do I test the Rx of a just acquired TS-830s?

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-13 05:57:30 UTC
From: <basketoak@...>
Topic: 56479 Message: 56501

Ashok,

I too operate an 830.....

Several things to check while on the air:

1. Is RF gain on max; is drive adjusted for max signal
2. Is your transmission line cable good? And all the connectors and connections. May want to get something new, pre made by someone like HRO or DX Engineering to compare with what you are using today.
3. Given your location (Palo Alto) you are in an area where tile roofs are very popular. Unfortunately, tile has a high metallic content and acts as an excellent shield, so that if you are using an attic antenna under a tile roof you probably wont receive much; in addition, some composition shingles have a high metallic content.

A further note, as you search for the problem, CHANGE ONE THING AT A TIME, then listen for DX, and keep a detailed log of what you do/change.

I am on the east coast, so we have different conditions, but with a very simple 20 meter dipole, only about 15 feet up, feeding 75ft of RG8X, I am able to work all South America, the Carribbean, Europe, Russia, Alaska, South Africa, and the Middle East on 20, 15 and 17. Further more, I regularly hear Antartic stations, but have not worked them yet.

At night, with my 40 mtr attic dipole, Europe and South America, as well as all US is easy.

Good luck in setting up your station, and let us know how things turn out.

Best 73's
Dave
KG4MGB
Burke, VA

---- "ashoks@... [TS-520_820_530_830]" <TS-520_820_530_830@yahoogroups.com> wrote:

==========
Hello everyone! I just joined this group and am looking forward to being part of the discussions and hopefully contribute. I got my tech license a month ago and am working towards my general. My main interest is DX HF.

I just purchased a very clean looking TS-830s from a local HAM for getting acquainted (Rx only of course). He said the rig works fine and it does receiver a few stations on 40m and sometimes 20m but not much else, using an attic mounted 20m antenna or a long wire outside.I realize the band conditions are not great and my antenna is not great, but would've expected to hear more stations. Also, I notice that I have to keep changing the drive control to get a good s-meter reading as a scan across a band.

Other than going through a full alignment, is there a way to just check the Rx on all bands - e.g. using the 25kHz marker?

73
Ashok
KM6HMW

--
Dave Beadner

56502. Re: TS-520 Gradual XMIT Problem

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-14 13:34:43 UTC
From: dllewiszz@...
Topic: 56493 Message: 56502

No suggestions on this? Is this rare/unusual?

Thx,

WA4FXT

56503. Re: TS-520 Gradual XMIT Problem

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-14 16:43:19 UTC
From: wagstw46@...
Topic: 56493 Message: 56503

Do you feel comfortable taking voltage readings at the Final tube socket lugs? If so, connect voltmeter to the control grids Pin 5. Should see approx -`100 vdc cut-off bias in RX mode. Now flip to Send (SSB mode, heaters on, SG switch on) and should see the -100vdc instantly shift to approx -55vdc.

If it doesnt shift instantly to -55vdc operating bias, connect a mini-grabber or alligator test lead to RLK wire wrap post on the RF board. This post is in the front left corner typically with a yellow lead wire on it. Now flip to Send again as you are monitoring the bias voltage on Finals control grids and touch the free end of your test jumper to chassis ground. If the cutoff bias instantly goes from -100vdc to -55vdc then you know that RLK is not seeing hard ground.

RLK must be grounded to ground one leg (VR-3) of the bias voltage adjust pot. This is accomplished by a NO contact on RL-1 Aux Control relay mounted under the VOX board. If this contact is dirty it can produce the problem you are seeing.

If you cant perform the above testing then just go ahead and pull RL-1 and measure and clean all the contacts.

Have to carefully roll the VOX board over without breaking off any wire wrap terminations and I would also drop the metal side plate with the bank of trim pots on it. This allows access with two hands to the relay. Will need to carefully dis-engage the bail wire.

Can clean contacts mechanically or electrically. I prefer electrically (12vdc current limited to approx 1 amp). Have to be careful with mechanical cleaning so you dont remove contact flash and dont bend the movable leafs. Can change contact pressure and contact wipe. When measuring contact resistance should see no more resistance than you see with your meter leads shorted. Millivolt drop test is better but people seldom do it. Should see less than 100mv IR drop.

Terry K9TW

56504. Re: TS-520 Gradual XMIT Problem

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-14 17:03:24 UTC
From: wagstw46@...
Topic: 56493 Message: 56504

If you dont want to also monitor IP for instant 60ma then you can do the Final tube control grid bias voltage monitoring with the heaters off and the SG switch off.

I would also take the time to clean the bias voltage adjust pot at this time.

Terry K9TW

56505. Re: How do I test the Rx of a just acquired TS-830s?

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-14 19:19:14 UTC
From: Wayne Bowyer
Topic: 56479 Message: 56505

I would like to answer/add to the question. I also have a recently acquired 830 and have a similar rx question. What is typically the signal strength of the calibrator signal on all bands(on a properly operating 830)?
I remember from my Heathkit days (HW-101) that the assembly manual gave a signal level range for the calibrator signal on a properly aligned receiver. Wondering what is typical for the 830?

Wayne
N4eyz

56506. RE: [TS-520_820_530_830] Re: How do I test the Rx of a just acquired TS-830s?

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-14 19:38:17 UTC
From: David Boothe
Topic: 56479 Message: 56506

S7 to S9 after tuning for max calibrator signal and peaking the DRIVE control.

Dave K3DWB

-----Original Message-----
From: TS-520_820_530_830@yahoogroups.com
[mailto:TS-520_820_530_830@yahoogroups.com]
Sent: Tuesday, February 14, 2017 2:19 PM
To: TS-520_820_530_830@yahoogroups.com
Subject: [TS-520_820_530_830] Re: How do I test the Rx of a just acquired TS-830s?

I would like to answer/add to the question. I also have a recently acquired 830 and have a similar rx question. What is typically the signal strength of the calibrator signal on all bands(on a properly operating 830)?
I remember from my Heathkit days (HW-101) that the assembly manual gave a signal level range for the calibrator signal on a properly aligned receiver. Wondering what is typical for the 830?

Wayne
N4eyz

56507. Re: [TS-520_820_530_830] Re: How do I test the Rx of a just acquired TS-830s?

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-14 20:49:15 UTC
From: Mark Gilger
Topic: 56479 Message: 56507

Wayne,
I recently checked all 3 of my 830's and they
range from S7.5 to S9.5. All were S9.5 on 20
meters, and S7.5 on 75 & 40 meters. Did not bother checking the other bands.

Mark

At 02:19 PM 2/14/2017, you wrote:
>
>
>I would like to answer/add to the question. I
>also have a recently acquired 830 and have a
>similar rx question. What is typically the
>signal strength of the calibrator signal on all
>bands(on a properly operating 830)?
>I remember from my Heathkit days (HW-101) that
>the assembly manual gave a signal level range
>for the calibrator signal on a properly aligned
>receiver. Wondering what is typical for the 830?
>
>Wayne
>N4eyz
>

56508. Re: [TS-520_820_530_830] Re: How do I test the Rx of a just acquired TS-830s?

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-15 00:01:42 UTC
From: wayne.bowyer@...
Topic: 56479 Message: 56508

Thanks Mark,

I've been slowly going thru mine (it had been a bit abused by an ex-cb'er). Had to replace many burnt resistors and caps in the final cage. I've been wondering a bit about the receiver as it just doesn't seem as good as my 520se. I'm seeing about S6 levels using the marker signal. I've lightly touched up alignment but really haven't seen much improvement. I don't have a signal generator so I can't verify what the real sensitivity numbers are (yet). But still working.

Thanks!

Wayne
n4eyz

56509. Re: [TS-520_820_530_830] Re: How do I test the Rx of a just acquired TS-830s?

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-14 19:31:36 UTC
From: Jeff Wimmer
Topic: 56479 Message: 56509

Wayne,
You should typically expect to see an S9 every 25khz for the calibrator signal if I'm not mistaken. Might be a bit lower on 10m. When I want to test my receiver, I inject a signal generator at about -102dBm and get a good tone. I've put a signal down to -130dBm and still heard a faint tone, not usable, but did indicate the receiver was is pretty good shape as far as sensitivity.
 73
Jeff - W5JGW

On Tuesday, February 14, 2017 1:19 PM, "Wayne Bowyer wayne.bowyer@... [TS-520_820_530_830]" <TS-520_820_530_830@yahoogroups.com> wrote:

  I would like to answer/add to the question. I also have a recently acquired 830 and have a similar rx question. What is typically the signal strength of the calibrator signal on all bands(on a properly operating 830)?
I remember from my Heathkit days (HW-101) that the assembly manual gave a signal level range for the calibrator signal on a properly aligned receiver. Wondering what is typical for the 830?

Wayne
N4eyz

56510. Re: [TS-520_820_530_830] Re: How do I test the Rx of a just acquired TS-830s?

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-15 02:06:27 UTC
From: wagstw46@...
Topic: 56479 Message: 56510

If you have a decent RF sig gen with a calibrated step attenuator you can check MDS and AGC threshold. If you dont know how to do this contact me off the list.

A well aligned TS830S can easily hear -125dBm (0.125uv or 1/8th uv) signal. A CW signal at this level can be copied if band conditions are good. -136dBm noise floor is typical.

AGC threshold should be around -115dBm. At that level the AGC buss voltage should just start down from its 3.6vdc RF-1 level and the S-meter should start to move up scale.

You can also do a "cheap and dirty" evaluation of your receiver if you dont have a good RF sig gen. If you have a VTVM with a dB scale. Something like a Heathkit IM-18 will work, You can measure the receiver noise gain with VTVM.

1. Set the receiver to 20 meters CW mode. Pick a dead spot on the band. Peak the background noise with the Drive control.
2. Switch to a dummy load or remove antenna coax from the SO-239.
3. Connect the VTVM across the speaker. (best to connect 8 ohm dummy load across remote speaker jack and then connect VTVM across the dummy load resistor. This way you wont rattle the speaker cone too hard).
4. Set the RF gain full CW.
5. Adjust AF gain pot for -10dB reading on the VTVM. Indication may float around a bit so may need to average the swings.
6. Switch from dummy load back to the antenna or reconnect the antenna.(do not touch the AF gain pot setting)
7. Note the the new dB level indicated on the VTVM. Should read +3dB to +4dB.

Terry K9TW

---In TS-520_820_530_830@yahoogroups.com, <wayne.bowyer@...> wrote :

Thanks Mark,

I've been slowly going thru mine (it had been a bit abused by an ex-cb'er). Had to replace many burnt resistors and caps in the final cage. I've been wondering a bit about the receiver as it just doesn't seem as good as my 520se. I'm seeing about S6 levels using the marker signal. I've lightly touched up alignment but really haven't seen much improvement. I don't have a signal generator so I can't verify what the real sensitivity numbers are (yet). But still working.

Thanks!

Wayne
n4eyz

56511. Re: How do I test the Rx of a just acquired TS-830s?

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-14 16:13:31 UTC
From: ashoks@...
Topic: 56479 Message: 56511

Thanks for the advice Dave! I finally got some time to try out your suggestion and here's what I'm seeing.

160m - 1.5Mhz S3 only but at the other end 2Mhz, I get S9
80m - S6 all through the band
40m - S8 all through the band
20m - S9 all through the band
10m - S7 all through the band.

Does this mean I need some alignment?

I tried tuning the Tx and measuring power into a dummy load and its close to 100W in the 40m band. Haven't tried other bands.

73
Ashok

56512. Re: How do I test the Rx of a just acquired TS-830s?

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-14 19:30:19 UTC
From: bob royston
Topic: 56479 Message: 56512

Usually I get a s9 on 40/80. Haven't tried other bands.. N4VNL/Bob

Bob Royston

56513. Ts 530 s. Display board

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-15 02:47:53 UTC
From: daveandjanshouse@...
Topic: 56513 Message: 56513

I had been given a ts530 s.
The display board has been hacked about. And print has dissipeared
i require either a replacement board (not going would be ok). Or a good copy of print board track lay out

Thanks guys
Dave
ZL1TPE

56514. Re: TS-520 Gradual XMIT Problem

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-15 03:12:36 UTC
From: dllewiszz@...
Topic: 56493 Message: 56514

Thanks for these suggestions! I'll dig into it ASAP. Since it always eventually comes up to full power, the dirty relay sounds like a good possibility.

73,
Dave WA4FXT

56515. Re: [TS-520_820_530_830] Ts 530 s. Display board

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-15 21:12:39 UTC
From: fpath fpath
Topic: 56513 Message: 56515

Try Walter.dilley@..., he has a huge array of parts.

73s
Dave
Vk5pdl
Sent from my HTC

"daveandjanshouse@... [TS-520_820_530_830]" <TS-520_820_530_830@yahoogroups.com> wrote:

I had been given a ts530 s.

The display board has been hacked about. And print has dissipeared

i require either a replacement board (not going would be ok). Or a good copy of print board track lay out

Thanks guys

Dave

ZL1TPE

56516. Re: TS-520 Gradual XMIT Problem

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-15 19:46:05 UTC
From: dllewiszz@...
Topic: 56493 Message: 56516

Success!
Terry, I did precisely as you described and all is well. Voltage on the tubes would not even drop all the way to -55, but would gradually drag down to around -65 or so. Grounding RLK would cause it to drop the rest of the way. Pulled and cleaned the relay with a thin tool. Repeated the voltage check and now I see a fast drop to -55V as specified!

Rig works well again and is ready to participate in the Novice Rig Roundup using the J-38 my dad was issued at the Midland Radio School in Kansas City in 1942 before heading off to the South Pacific where he was a high-speed CW op. He never became licensed as a ham but instilled in me the desire to be a ham and get the First Phone, and numerous parallel activities.

It's great to receive clear guidance from someone who knows how something works. Thanks again, and

73,

Dave WA4FXT

56517. Ts 530 s. Display pcb. X54-1540-00

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-15 19:27:55 UTC
From: daveandjanshouse@...
Topic: 56517 Message: 56517

I have been gifted a ts 530 s
The display pcb has tracks butched. I need a clear copy of track layout
Or a non working display pcb.

Chers guys

Dave
ZL1TPE

56518. Re: [TS-520_820_530_830] Ts 530 s. Display board

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-15 21:20:08 UTC
From: Lou Blasco
Topic: 56513 Message: 56518

Sorry to intrude but Yahoo! chops up email addresses unless you split
them up a little

try walter dot dilley at gmail dot com

Regards

Lou
VK3ALB

At 08:12 16/02/2017, you wrote:
>
>
>
>Try Walter.dilley@..., he has a huge array of parts.
>
>73s
>Dave
>Vk5pdl
>Sent from my HTC
>
>"daveandjanshouse@... [TS-520_820_530_830]"
><TS-520_820_530_830@yahoogroups.com> wrote:
>
>
>
>I had been given a ts530 s.
>
>The display board has been hacked about. And print has dissipeared
>
>i require either a replacement board (not going would be ok). Or
>a good copy of print board track lay out
>
>
>Thanks guys
>
>Dave
>
>ZL1TPE

56519. Re: TS-520 Gradual XMIT Problem

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-15 23:31:18 UTC
From: wagstw46@...
Topic: 56493 Message: 56519

OK Dave glad it was relatively easy.

I never know the persons knowledge/experience level who post here for help.

I could have just told you to pull the relay, but I wanted you to know a little bit about how Final Tube cutoff bias is switched to operating bias and how to troubleshoot to determine if relay contact RL1-3 is the culprit.

I still use my old J-38 key on the service bench when I test KW hybrid keying circuits, adjust sidetone volume level etc. I likewise have had it since my Novice days in the early 60s. Really fun times!

73s
Terry K9TW

56520. Re: [TS-520_820_530_830] Ts 530 s. Display board

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-16 00:36:35 UTC
From: Walter Dilley
Topic: 56513 Message: 56520

Thanks Dave VK5 and Lou VK3.
I have responded to Dave ZL1's email and we'll see what happens from there.

Walter, kd7dny

On Wed, Feb 15, 2017 at 2:20 PM, Lou Blasco radio@...
[TS-520_820_530_830] <TS-520_820_530_830@yahoogroups.com> wrote:

>
>
> Sorry to intrude but Yahoo! chops up email addresses unless you split them
> up a little
>
> try walter dot dilley at gmail dot com
>
> Regards
>
> Lou
> VK3ALB
>
>
> At 08:12 16/02/2017, you wrote:
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> Try Walter.dilley@..., he has a huge array of parts.
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> 73s
> Dave
> Vk5pdl
> Sent from my HTC
>
> "daveandjanshouse@....nz [TS-520_820_530_830]"
> <TS-520_820_530_830@yahoogroups.com> wrote:
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> good copy of print board track lay out
>

>
> Thanks guys
>
> Dave
>
> ZL1TPE
>
>
>
>
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>

56521. Re: [TS-520_820_530_830] Re: How do I test the Rx of a just acquired TS-830s?

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-16 14:34:50 UTC
From: David Boothe
Topic: 56479 Message: 56521

Ashok,
80 seems a little low. If you want to check alignment, Terry K9TW has an excellent paper on this procedure on his website.
Dave K3DWB

Sent from my iPad

On Feb 14, 2017, at 11:13 AM, "ashoks@... [TS-520_820_530_830]" <TS-520_820_530_830@yahoogroups.com> wrote:

> Thanks for the advice Dave! I finally got some time to try out your suggestion and here's what I'm seeing.
>
>
> 160m - 1.5Mhz S3 only but at the other end 2Mhz, I get S9
> 80m - S6 all through the band
> 40m - S8 all through the band
> 20m - S9 all through the band
> 10m - S7 all through the band.
>
> Does this mean I need some alignment?
>
> I tried tuning the Tx and measuring power into a dummy load and its close to 100W in the 40m band. Haven't tried other bands.
>
> 73
> Ashok
>

56522. Re: TS-830S QRP via ALC

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-16 21:24:44 UTC
From: ashoks@...
Topic: 56393 Message: 56522

Hi Mike, I don't have an answer but am planning on trying this on my 830s, this weekend. Will let you know. We

73
Ashok

56523. Re: TS-830S QRP via ALC

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-16 21:25:38 UTC
From: ashoks@...
Topic: 56393 Message: 56523

Might be useful if you share a ckt diagram of the connections and a picture too, just in case...

73
Ashok

56524. Re: TS-830S QRP via ALC

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-16 21:30:46 UTC
From: ashoks@...
Topic: 56393 Message: 56524

I think I sent a personal reply when I was intending to post here.

Mike, I don't have an answer but am planning on trying the same thing on my 830s. Will let you know. In the meantime, sharing the ckt and perhaps a picture might help just in case you missed something. Did you measure the negative voltage you're applying to the ALC Pin?

73
Ashok

56525. TS-830s low recieve

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-18 00:48:11 UTC
From: wayne.bowyer@...
Topic: 56525 Message: 56525

I've been slowly restoring an 830 back to operational status. Latest discovery was in trying to get the rx sensitivity back up to snuff. Thru a couple of posts on QRZ it was suggested to me that there may be a problem with L41 on the Rf Unit board. Most likely an open within the transformer. To my surprise I found that I could not find L41.....as in it's been apparently removed from the board. I've yet to pull the board but from looking at the holes in the board compared to other unpopulated board areas it does in fact seem that it's been removed. So now I guess I'm looking for that particular transformer or possibly a defunct RF board from another 830. I'm still scratching my head wondering why that part is missing and on top of that.....how would the receiver work as well as it does without the part? The current signal level (cal signal) is S5-to S6. I'm expecting a properly working receiver to show S9 or so. Or should it even work at all?

Some history on the rig.....was apparently used in the 11 meter world at one time.

Thanks
Wayne
n4eyz

56526. Re: TS-830s low recieve

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-18 14:33:45 UTC
From: wagstw46@...
Topic: 56525 Message: 56526

If L41 has been removed you would have no receiver unless someone removed it and installed a jumper on the foil side of the board when they found out it is unobtainable or they failed at effort to rewind it. Highly unusual but nothing surprises me anymore.

If you had performed Coil Pack alignment in your efforts to improve receiver sensitivity you should have noticed that L41 was missing as it is first adjustment in Service Manual Step 15. L41 is referred to as the 1.8 Ant Coil. Coil pack alignment must be done in the band and frequency sequence as noted. Cant skip around.

It is a round can with a gold/tan ferrite core. It is same size and shape as L13 Mixer with red core.

You can usually tell if the RF board has been previously removed by looking at the soldering on the RF negative feedback lead wire at its PA cage wall feedthru and the white neutralizing lead wire tacked on to the frame of VC-3.

Terry K9TW

56527. Re: TS-830s low recieve

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-18 15:11:25 UTC
From: wagstw46@...
Topic: 56525 Message: 56527

I would also perform IFT alignment. Not unusual to find the IF transformers messed with and often find L9 grossly mis-adjusted. Usually adjusted for max gain which is incorrect. It is adjusted to provide an S1 indication on a -105dBm signal.

Also, measure the resistance from center pin of your SO-239 connector to TP-1 on the RF board. If you look at the schematic you will see that there are numerous contacts in this path to front end of the receiver including NC contact of the Ant TR relay, Xverter Mini-Din switch, RF attenuator switch, and Molex connector 3 at the RF board.

Should read 1 ohms or less ideally. Not uncommon to read from 2 to 5 ohms or higher. All contacts in the path with exception of the RF attenuator switch can be cleaned. About best you can do with the RF attenuator is repeated cycling.

Terry K9TW

56528. the "Drifter"

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-18 01:21:04 UTC
From: croberts@...
Topic: 56528 Message: 56528

I have a TS-520s that would be perfect (power on all bands, etc) except that it drifts horribly.

Lately I've been just leaving the radio on (heaters off) so is won't drift so bad on startup. But it still drifts a lot,

Any tips and where I should start with this? I would have to be in the IF area, wouldn't it? Both rx and tx have to be together because the drifts on tx and rx. People keep complaining that I'm off freq but it's the radio drifting back and forth.

Chuck
N2KWO

56529. Question about proper loading.

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-18 09:42:51 UTC
From: remingtonhill1@...
Topic: 56529 Message: 56529

Hello,

I have a question that I can't seem to get a good consensus from the usual places, K4EAA, Hybridrestore.com, etc.

Apparently, it's better to slightly "over-couple" tube amplifiers, that is, use ever-so-slightly too-little loading capacitance. This decreases the grid current and increases the plate current for a given amount of drive, and improves linearity. This also protects the most sensitive and easily damaged parts of vacuum tubes. (from: http://www.w8ji.com/loading_amplifier.htm http://www.w8ji.com/loading_amplifier.htm)

I was reading an Ameritron manual (AL80B) and this is apparently achieved by slightly adjusting the loading control to the right (clockwise) of the position of maximum output power.

Jim at hybridrestore.com says "I set the Load control on the right side (clockwise) side of its peak, not enough to cause the meter to go down appreciably, just to the point that it might start it’s downward movement."

K4EAA however seems to want to keep the load control as minimal (counter-clockwise) as possible in his tuning instructions, which is obviously inconsistent (if I'm reading correctly).

I guess my question is, since I didn't bother to look last time I had my TS530S open - Is the loading capacitor fully meshed when the load control is set to minimum (fully counter-clockwise)?

If the turning the load control clockwise "unmeshes" the load capacitor, than I would assuming keeping the load control slightly to the right of max power would be the correct tuning position.

Thanks,
73
Shane KG5RJS

56530. Grounding Post Thread Size

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-18 15:17:16 UTC
From: brian.e.mee@...
Topic: 56530 Message: 56530

Does anyone know off hand what the size and thread of the grounding lug on the back of a TS-520S is?

I assume its metric.

It's warm in VA today and I'm going to work on getting my shack going, but there is no nut or wingnut on the ground lug on the back.

Thanks in advance.

Brian
KM4TAP

56531. Oddity with TS-530SP on 80m and 160m

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-19 00:15:35 UTC
From: croberts@...
Topic: 56531 Message: 56531

I've been cleaning up my TS-530SP to be my main rig. So far it is going well.
But.. . when I switch to 80M or 160m the "indicated' place where 80 and 160 are supposed to tune up I can't a dip.
But I can find a dip about 180 degrees from where it is supposed to be. I can tune them (80m and 160m) and get the 100w that I want but it seems, well, just wrong. LOL

So far I've put in the KENWOOD HIGH-VOLTAGE REPAIR KIT, the KENWOOD FINAL CAGE PARTIAL REPAIR KIT, and replaced the 270pF 80m cap and the 680+100 pF caps for 160m.

Also, because I was suspicious of the band switch in the cage, I double checked that wafer switch. It is hard to really see it but I can see that wiper is pushed up as the copper plate slides by it. On all three wipers.

The plate air capacitor is fully outside of the air gap capacitor when the rig is tuned on 80/160. If that makes sense. Doesn't seem correct. That air gap has to be there for a reason. Tuning come to mind.

That seems odd to me. Well, the placement of the indicator on the plate markings are odd, too.

I'd think that the capacitors for 80m and 160m are not the correct values but I double checked that.

All of the other bands show correct placement on the markings.

Any thoughts would be appreciated. I don't know if I should run the rig on 80/160 even though they DO seem to work.

Chuck

N2KWO

56532. Re: [TS-520_820_530_830] the "Drifter"

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-19 03:32:07 UTC
From: Wes Will
Topic: 56528 Message: 56532

On Saturday, February 18, 2017 01:21:04 you wrote:
> I have a TS-520s that would be perfect (power on all bands, etc) except
> that it drifts horribly.

> Lately I've been just leaving the radio on (heaters off) so is won't drift
> so bad on startup. But it still drifts a lot,

Have you opened the case (top and bottom) and loosened slightly then tightened every one of the board-mounting / chassis-ground screws? BE CAUTIOUS INSIDE, check the list archives for the MANY instances of one or more of us providing high-voltage capacitor discharge instructions. (NOT shorting them to the case with a screwdriver or the like.)

The HV section has enough energy in it to stop your heart, or give you a nasty shock, anyway. Cuts and contusions from involuntarily jerking backwards away from the radio is the least you can expect if you don't treat the machinery with proper respect.

--
Wes Will
wes@...
N9KDY

"I have the gravest of problems believing that any Creator so wonderfully wise and competent enough to create an operational universe is so utterly inept as to have to micromanage the affairs of a sub-species of Chimpanzee on a tenth rate planet, orbiting a third rate star, much of the way out of a spiral arm of a middling galaxy in an entire, vast universe!"

56533. Re: [TS-520_820_530_830] Grounding Post Thread Size

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-19 03:41:07 UTC
From: Wes Will
Topic: 56530 Message: 56533

On Saturday, February 18, 2017 15:17:16 you wrote:
> Does anyone know off hand what the size and thread of the grounding lug on
> the back of a TS-520S is?
> I assume its metric.

M6.

Same one used on the TS922 radio and apparently several others. The TS922 service manual lists the same part number (N14-0020-04) and also lists it as an M6.

--
Wes Will
wes@...
N9KDY

56534. Re: [TS-520_820_530_830] Oddity with TS-530SP on 80m and 160m

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-19 04:03:02 UTC
From: fpath fpath
Topic: 56531 Message: 56534

Hi Chuck,

I would have a look on in the final date s22, based on your description, it sounds like the ladder cap are out of spec, you this usually includes 40m.
The caps are behind the front tube and to get affected by best and can crack. These are type 1 from HV caps. c26 22pf, c10 390pf and c9 100pf. C10 usually cracks or drops below 200pf.

The half dozen radios that I have repaired with similar issue had same symptoms.

73s
Dave
Vk5pdl

"croberts@... [TS-520_820_530_830]" <TS-520_820_530_830@yahoogroups.com> wrote:

I've been cleaning up my TS-530SP to be my main rig. So far it is going well.
But.. . when I switch to 80M or 160m the "indicated' place where 80 and 160 are supposed to tune up I can't a dip.
But I can find a dip about 180 degrees from where it is supposed to be. I can tune them (80m and 160m) and get the 100w that I want but it seems, well, just wrong. LOL

So far I've put in the KENWOOD HIGH-VOLTAGE REPAIR KIT, the KENWOOD FINAL CAGE PARTIAL REPAIR KIT, and replaced the 270pF 80m cap and the 680+100 pF caps for 160m.

Also, because I was suspicious of the band switch in the cage, I double checked that wafer switch. It is hard to really see it but I can see that wiper is pushed up as the copper plate slides by it. On all three wipers.

The plate air capacitor is fully outside of the air gap capacitor when the rig is tuned on 80/160. If that makes sense. Doesn't seem correct. That air gap has to be there for a reason. Tuning come to mind.

That seems odd to me. Well, the placement of the indicator on the plate markings are odd, too.

I'd think that the capacitors for 80m and 160m are not the correct values but I double checked that.

All of the other bands show correct placement on the markings.

Any thoughts would be appreciated. I don't know if I should run the rig on 80/160 even though they DO seem to work.

Chuck

N2KWO

56535. Re: [TS-520_820_530_830] the "Drifter"

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-19 12:07:54 UTC
From: n4jhy@...
Topic: 56528 Message: 56535

Hi Wes,

I am somewhat new to this users group, and the purchase of a TS520se and then a TS820s (broken) has me really appreciating this forum.

If I were in your situation, with a drift problem, here is what I would do. Some of this is from reading other members suggestions.

1- hook up to the supply voltage to the VFO and carefully watch it as the radio drifts. I have read that if this particular voltage is not stable, the VFO will drift. I have read of others that built a separate regulator for the VFO to keep it stable.

2- If the vfo pans out to not be the problem, I would put your counter on each of the oscillators in the radio to see if you can discover the culprit.

I liked the 820s so much better than the 520se, that I sold the 520.
The 820 was a lot more stable than the 520 I had.

The last issue I had to deal with on the 820s was that the khz dial wheel would slip.

I bought a VFO from a ham that was parting out a TS-820 for a reasonable amount. When it arrived I installed it into my 820. It didn't have the slipping dial, so expected to best.

Well, I will tell you the replacement VFO drifted pretty bad, and never would stabilize out.
This drift really bothered me as the original VFO was wonderfully stable after about a 1/2 hour being on.
I did a total dissect of the drive system on the original VFO and cleaned out a lot of gunked lube.
After re-assembly I reinstalled it back into the 820s and life is good again.

What I take from this is that I now believe these VFO's are like a crap shoot. Some drift, and some don't.
That's ham radio for you!!! LOL

Best luck, Bruce N4JHY

56536. Re: Question about proper loading.

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-19 14:40:38 UTC
From: wagstw46@...
Topic: 56529 Message: 56536

Shane:

I wouldnt worry too much about wanting to over-couple your KW hybrid. It is configured as a Class AB-1 linear amp so there is no grid current. It is RF voltage driven. The moment the RF drive swings the control grid positive with respect to the cathode and there is a hint of grid current (I mean microamperes of grid current) the ALC amp transistor turns on and supplies approx -1vdc at the Collector which bucks the ALC buss voltage which reduces the RF drive from the TIF amp on the IF board. Max grid current at full ALC is approx 45ua.

What Tom Rauch is talking about regarding the effects of under and over coupling is related to high power linear amps and not Class AB-1 exciters.

I doubt you will find any vintage commercial exciter like a KW hybrid where the owners Operating Manual directs you to over-couple (yes slightly open the plates of the plate load capacitor at the conclusion of loading).

Yes when your plate load cap is full CCW the plates are fully meshed. That means max capacitance which means minimum capacitive reactance which means higher RF circ current in the tank and little rf current being transferred to the load (antenna or dummy load) which is in parallel with the Plate Load cap.

As you open the plates by turning clockwise the capacitance goes down which means the capacitive reactance goes up which means more RF current will flow in the parallel leg ie the antenna or dummy load. Loaded to approx 225ma there is approx 2.8 rf amps circ current in the Tank. By the time you have loaded to 100 watts output you will have opened or unmeshed the Plate load cap plates and the capacitive reactance of the Plate load cap will approx equal the resistance/reactance that the antenna presents and that 2.8 rf amps will split evenly between the two parallel paths ie 1.4 rf amp at 100 watt output in the load and approx 71rf volts.

If you redraw the Pi-network easy to see that the load at the SO-239 connector (antenna) is in parallel with the plate load capacitor. So you have a simple parallel resistor circuit with one resistor (plate load cap) being variable. Rules for current flow in two parallel resistive branches apply.

Also, with the TS820S and TS830S it is nearly impossible to over drive as they both have ALC circuits and RF negative feedback circuits which assure good linearity (wont splatter on the band).

I understand why you would have this question and be interested in over and under coupling, but I submit it is a more applicable question for your 1500 watt amp.

Terry K9TW

56537. Re: Question about proper loading.

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-19 14:54:11 UTC
From: wagstw46@...
Topic: 56529 Message: 56537

I forgot to mention if I were you I would buy a wattmeter and simply load for 100 watts output without exceeding approx 225ma plate current.
That is why KW provides us with the RF relative power position and all of the owners manuals directs that you use it to load with. I prefer to put a real number on it and for couple other reasons recommend new folks use an inline wattmeter. See my white paper on my website.

Ken K4EAA uses the old dip and load method up to a point (around 200ma) and then finishes by using the RF relative power position. This is because in a Class AB-1 linear plate current becomes less and less discernable so not a reliable way to load. Nothing wrong with Kens method.

Where I disagree with him is using the plate load control to reduce loading.

Proper way is to reduce RF drive back at a low level point. In our case at the TIF amp. Easy to do in CW mode using the CAR Level pot. No such RF drive control in SSB mode. Dont use the mic gain as you are reducing carrier suppression, reducing the peak to average power, and reducing talk power or punch. Only other option to us is applying variable negative voltage to the ALC buss via a 9vdc battery and pot. This work well to reduce the RF drive from the TIF amp.

Terry K9TW

56538. Hybrid Net Update (February 19, 2017)

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-19 19:31:00 UTC
From: Mark Gilger
Topic: 56538 Message: 56538

Net Info:
Saturday: 7.235 ☐ 7.233 @ 3:30pm Eastern following the Swan Tech Net
Sunday: 14.316 @ 1800 UTC following the ICOM net

Web Site:
<http://www.wb4hfn.com/KENWOOD/KenwoodHomePage.htm>http://www.wb4hfn.com/KENWOOD/KenwoodHomePage.htm

The net started its existence on November 1st,
2011. The yearly check-in totals are posted at the bottom of this message.

The Saturday net was run by me, WB0IQK. There
were 23 stations checking in under GOOD band conditions.

We had the following number of radios checking in.
3 running TS-520(x)
2 running TS-530(x)
1 running TS-820(x)
4 running TS-830S
0 running TS-510
0 running TS-511
0 running TS-515
1 running 599 twins
0 running TS-900

I was running my TS-830S + Drake L4B amplifier.

The Sunday net was run by me, WB0IQK. There were
14 stations checking in under GOOD band conditions.

We had the following number of radios checking in.
1 running TS-520(x)
0 running TS-530(x)
1 running TS-820(x)
5 running TS-830S
0 running TS-510
0 running TS-511
0 running TS-515
1 running 599 twins
0 running TS-900

I was running my TS-830S + Drake L-4B amplifier.

We have been having several people checking in
regularly with their TS-430, TS-440, and
TS-940☐s, which of course is not a hybrid,
although over 30+ years old. Everyone is welcome

as long as they have an interest in the older equipment.

If anyone would be interested in filling in as a
net control station, please send me an email.
Currently it's just myself, Jimmy, WB2KNR, and
Greg, WQ0P, and Rodger, K1HH has agreed to help
with relays . I would like to get several more.
If we do, we can alternate so everyone might be
on a 3-4 week rotation. It's a lot of fun and a
good way to make sure you station is optimized.

For anyone that has not heard, we have a new web
site that WB4HFN is hosting. He currently has a
very nice site for Drake, Collins and Heathkit
and now Kenwood Hybrids. Good quality manuals
plus sale flyers and brochures will be found
here, along with user supplied information for all Hybrids.

His URL is:
<http://www.wb4hfn.com/KENWOOD/KenwoodHomePage.htm>http://www.wb4hfn.com/KENWOOD/KenwoodHo
mePage.htm

To date, we have had the following check-in:

Nov. 2011 ☐ Oct. 2012 Saturday total 754
check-ins, Sunday total 563 check-ins
Nov. 2012 - Oct. 2013 Saturdays total 828 check-ins, Sunday total 609 check-ins
Nov. 2013 - Oct. 2014 Saturdays total 842 check-ins, Sunday total 744 check-ins
Nov. 2014 ☐ Oct 2015 Saturdays total 962 check-ins, Sunday total 669 check-ins
Nov. 2015 ☐ Oct 2016 Saturdays total 807 check-ins, Sunday total 628 check-ins

November 2016, Saturday net total = 80, Sunday total = 68
December 2016, Saturday net total = 73, Sunday total = 69
January 2017, Saturday net total = 50, Sunday total = 90
February 2017, Saturday net total = 70, Sunday total = 46 (Month to date)

Net Info:
Saturday: 7.235 @ 3:30 Eastern following the Swan Tech Net
Sunday: 14.316 @ 1800 UTC following the ICOM net

Web Site:
<http://www.wb4hfn.com/KENWOOD/KenwoodHomePage.htm>http://www.wb4hfn.com/KENWOOD/KenwoodHo
mePage.htm

73's,
Mark, WB0IQK

56539. Re: [TS-520_820_530_830] the "Drifter"

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-19 20:49:04 UTC
From: <carboyhat@...>
Topic: 56528 Message: 56539

Chuck I would clean the wiper of the VFO tuning capacitor. My Kenwood R-1000 receiver began to drift badly a year ago. After removing the top and bottom covers, I was able to put a drop or two of some contact cleaner on the wiper by gaining access through an opening. I spun the main tuning knob up and down its travel and the drift is now limited to the normal half hour "warm up" that is to be expected. After that is minimal drift. A popular contact cleaner is DeOxit mentioned on this group frequently. I used a product sold by Wurth-- Contact OL. It comes out of the spray can straw as a faint red. I bought a can from the Wurth salesman that used to stock the hardware/shop supplies at an auto shop I used to work at. I also put a drop of light oil from a bottle of "turbine oil" I bought at an HVAC supply house on the tuning mechanism ball bearings, shafts, bushings, etc.

While in there, I monitored the voltage going to the VFO and it stabilized within minutes to the prescribed value.

73 de Bob, AA4AI

On 18 Feb 2017 01:21:04 +0000 "croberts@... [TS-520_820_530_830]" <TS-520_820_530_830@yahoogroups.com> writes:

I have a TS-520s that would be perfect (power on all bands, etc) except that it drifts horribly.

Lately I've been just leaving the radio on (heaters off) so is won't drift so bad on startup. But it still drifts a lot,

Any tips and where I should start with this? I would have to be in the IF area, wouldn't it? Both rx and tx have to be together because the drifts on tx and rx. People keep complaining that I'm off freq but it's the radio drifting back and forth.

Chuck
N2KWO

Megyn Kelly's Bombshell Secret Exposed By NBC
thedailyaccess.com
http://thirdpartyoffers.juno.com/TGL3141/58aa04a7a0f6b4a76d4dst02duc

56540. RE: [TS-520_820_530_830] the "Drifter"

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-19 21:10:39 UTC
From: Joe
Topic: 56528 Message: 56540

Me? I would leave the heaters on! It is the tubes heating up and coming to temp that creates the drift condition. Many, as you do, leave the heaters off, thinking it will prolong the life of the tube. The opposing theory is that the constant cooling and heating, actually puts more stress on the tube and actually shortens its life.

Your choice on belief. No empirical proof either way. (That I know of!)

Perhaps some of the more technical minds here can shed some more light on the subject!

Joe – W7RKN

From: TS-520_820_530_830@yahoogroups.com [mailto:TS-520_820_530_830@yahoogroups.com]
Sent: Sunday, February 19, 2017 12:49 PM
To: TS-520_820_530_830@yahoogroups.com
Subject: Re: [TS-520_820_530_830] the "Drifter"

☐

I have a TS-520s that would be perfect (power on all bands, etc) except that it drifts horribly.

Lately I've been just leaving the radio on (heaters off) so is won't drift so bad on startup. But it still drifts a lot,

Any tips and where I should start with this? I would have to be in the IF area, wouldn't it? Both rx and tx have to be together because the drifts on tx and rx. People keep complaining that I'm off freq but it's the radio drifting back and forth.

Chuck
N2KWO

_____
<http://thirdpartyoffers.juno.com/TGL3142/58aa04a7a0f6b4a76d4dst02duc> Megyn Kelly's Bombshell Secret Exposed By NBC
thedailyaccess.com
<http://thirdpartyoffers.juno.com/TGL3142/58aa04a7a0f6b4a76d4dst02duc>
http://thirdpartyoffers.juno.com/TGL3142/58aa04a7a0f6b4a76d4dst02duc
SponsoredBy Content.Ad <https://d32oduq093hvot.cloudfront.net/icons/sponsoredlinksby.png>

56541. Fw: Re: [TS-520_820_530_830] the "Drifter"

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-19 22:53:06 UTC
From: <carboyhat@...>
Topic: 56541 Message: 56541

I sent my reply and my reply never made it so I will resend:

Chuck I would clean the wiper of the VFO tuning capacitor. My Kenwood R-1000 receiver began to drift badly a year ago. After removing the top and bottom covers, I was able to put a drop or two of some contact cleaner on the wiper by gaining access through an opening. I spun the main tuning knob up and down its travel and the drift is now limited to the normal half hour "warm up" that is to be expected. After that is minimal drift. A popular contact cleaner is DeOxit mentioned on this group frequently. I used a product sold by Wurth-- Contact OL. It comes out of the spray can straw as a faint red. I bought a can from the Wurth salesman that used to stock the hardware/shop supplies at an auto shop I used to work at. I also put a drop of light oil from a bottle of "turbine oil" I bought at an HVAC supply house on the tuning mechanism ball bearings, shafts, bushings, etc.

While in there, I monitored the voltage going to the VFO and it stabilized within minutes to the prescribed value.

73 de Bob, AA4AI

On 18 Feb 2017 01:21:04 +0000 "croberts@... [TS-520_820_530_830]" <TS-520_820_530_830@yahoogroups.com> writes:

I have a TS-520s that would be perfect (power on all bands, etc) except that it drifts horribly.

Lately I've been just leaving the radio on (heaters off) so is won't drift so bad on startup. But it still drifts a lot,

Any tips and where I should start with this? I would have to be in the IF area, wouldn't it? Both rx and tx have to be together because the drifts on tx and rx. People keep complaining that I'm off freq but it's the radio drifting back and forth.

Chuck
N2KWO

College Student Discovers The Fastest Way To Lose Weight!
Capitalizing Calories
http://thirdpartyoffers.juno.com/TGL3141/58aa2193cbe1121934f9est01duc

56542. The Drifter

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-19 23:03:45 UTC
From: <carboyhat@...>
Topic: 56542 Message: 56542

Now here is the 3rd attempt:

Chuck I would clean the wiper of the VFO tuning capacitor. My Kenwood R-1000 receiver began to drift badly a year ago. After removing the top and bottom covers, I was able to put a drop or two of some contact cleaner on the wiper by gaining access through an opening. I spun the main tuning knob up and down its travel and the drift is now limited to the normal half hour "warm up" that is to be expected. After that is minimal drift. A popular contact cleaner is DeOxit mentioned on this group frequently. I used a product sold by Wurth-- Contact OL. It comes out of the spray can straw as a faint red. I bought a can from the Wurth salesman that used to stock the hardware/shop supplies at an auto shop I used to work at. I also put a drop of light oil from a bottle of "turbine oil" I bought at an HVAC supply house on the tuning mechanism ball bearings, shafts, bushings, etc.

While in there, I monitored the voltage going to the VFO and it stabilized within minutes to the prescribed value.

73 de Bob, AA4AI

_____
The Site All Women Just Love, See Why
tophatter.com
http://thirdpartyoffers.juno.com/TGL3141/58aa242833fde24287166st01duc

56543. Re: [TS-520_820_530_830] the "Drifter"

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-19 23:14:40 UTC
From: Mark Gilger
Topic: 56528 Message: 56543

Check,
An easy thing you can do is to make sure all of the mechanical stuff is ok.

1) The VFO gets it's 9 volts from the AF Unit
board. Make sure you back out the screws that
mount the board and then re tighten them.
2) Measure the AF board 9 volts over a period of
time and make sure it's stable. If not you will
need to find the bad component or install a
dedicated 9 volt regulated board and move the 9
volts from the AF board to the new regulated
board. I doubt if you will need to do this.
3) The 9 volts goes through the remote VFO socket
jumper on the back of the radio. Remove the plug,
put a couple of drops of DeOxit D5 on the pins
and reinsert into the socket several times.
4) Move to the rear of the VFO and remove the 2
prong plug. That carries the 9 volts and
ground. Clean it with DeOxit D5 and reinsert several times.
5) Remove the RCA plug on the rear of the vfo and clean it.
6) Check to make sure the grease inside the VFO
that resides in the front bearing has not gotten
hard. If it has you can spray a bit (sparingly)
of WD40 in the bearing, wiping the excess
away. Rotate the vfo back and forth 20-30 times
and you should see the grease become ply able
again. You could also, if real bad, use WD40 to
wash the grease out of the bearing completely and
repack with a light grease. Several different
types the guys on here can recommend.
7) If after all of this, it still continues to
drift, other than trying to find the component
that's causing the drift problem, you can install
a VFO Stabilizer. Do a Google search, you will find 2 of them that will work.

Mark, WB0IQK

At 03:49 PM 2/19/2017, you wrote:
>
>
>ï»¿ I have a TS-520s that would be perfect
>(power on all bands, etc) except that it drifts horribly.
>
> Lately I've been just leaving the radio on
> (heaters off) so is won't drift so bad on startup. But it still drifts a lot,
>

> Any tips and where I should start with
> this? I would have to be in the IF area,
> wouldn't it? Both rx and tx have to be
> together because the drifts on tx and rx.
> People keep complaining that I'm off freq but
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>
>Chuck
>N2KWO
>
>
>_____
>Megyn Kelly's Bombshell Secret Exposed By NBC
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>http://thirdpartyoffers.juno.com/TGL3142/58aa04a7a0f6b4a76d4dst02duc
>SponsoredBy Content.Ad
>
>

56544. Re: the "Drifter"

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-19 22:37:58 UTC
From: croberts@...
Topic: 56528 Message: 56544

Joe,
I did try leaving the heaters on. For about 4 days. Still drifts.

As far a whether heaters on/off is no doubt a debate. I beleive that most older electoncs does have shorter life is it turned on and off a lot. Like light bulbs; they always blow when you turn them on.

But the drifting is extreme. And it is sad to see it.

Chuck
N2kwo

56545. Re: [TS-520_820_530_830] Oddity with TS-530SP on 80m and 160m

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-19 04:35:57 UTC
From: croberts@...
Topic: 56531 Message: 56545

Another blunder, I must admit. I was looking at the caps for wafer S22-3; 670+100pf and 270pf. I installed the wrong caps. I felt that the caps were too large and thus the air gap capacitor was out in the air.

I need waver S22-2, 390pF+22pF (for 180m) and 100pF (for 80m).

It it a tight spot. I lost some of the fiber tube to isolatat them. Does any know where you can buy that fabric tube insulation?

Thanks for waking me up!!

I felt it was that wafer and caps that I needed caps for but then when I went back to the schematic I wrote down the wrong values.

Thanks so much.

I'll be so happy when I've completed work on these radio's and have a nice, solid radio. I just got my Alpha Delta Parallel Dipole, DX-LBPLUS up in the air. Not high enough, but as high as possible.

On a side note, do many people need parts for TS-520S and TS-530S? I am considering selling or parts out them so I can get some money out of them. The TS-520S drifts horribly. Don's seem to see an answer for it.

Chuck
N2KWO

56546. Re: [TS-520_820_530_830] the "Drifter"

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-19 15:51:00 UTC
From: croberts@...
Topic: 56528 Message: 56546

Hi Bruce,

I was the person that posted on this and Wes added his thoughts.

Tearing down everything in able to crack open the VFO is something that I'm just not ready to. I have 4 hybrids and this one (Drifter) was the first. If this one can not be fixed without cracking open everything then I will sell it to someone that has the time, patience and inclination. It is the cleanest radio that I've purchased and nothing has been touched. Make power an all bands and is a great radio lest the drifting.

I'll be watching the 9v line so see if that is the issue. Seem like it is a common problem and some have indeed just supplement the 9v line (some times with a 9v battery!!).

Thanks
Chuck
N2KWO

56547. Re: [TS-520_820_530_830] the "Drifter"

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-19 04:39:44 UTC
From: croberts@...
Topic: 56528 Message: 56547

Wes,
I haven't done that. The case or the complete core? I guess it is worth a try. At least I don't have to remove them and keep the in order!

Chuck
N2KWO

56548. Re: Grounding Post Thread Size

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-19 15:42:49 UTC
From: brian.e.mee@...
Topic: 56530 Message: 56548

Thanks Wes, off to Home Depot.

Brian Mee
KM4TAP

56549. Re: [TS-520_820_530_830] Oddity with TS-530SP on 80m and 160m

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-20 00:44:21 UTC
From: fpath fpath
Topic: 56531 Message: 56549

Hi Chuck,

I use small heat shrink, the old stuff when over heated may fall apart.

73s

Dave
Vk5pdl
Sent from my HTC

"croberts@... [TS-520_820_530_830]" <TS-520_820_530_830@yahoogroups.com> wrote:

Another blunder, I must admit. I was looking at the caps for wafer S22-3; 670+100pf and 270pf. I installed the wrong caps. I felt that the caps were too large and thus the air gap capacitor was out in the air.

I need waver S22-2, 390pF+22pF (for 180m) and 100pF (for 80m).

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Thanks so much.

I'll be so happy when I've completed work on these radio's and have a nice, solid radio. I just got my Alpha Delta Parallel Dipole, DX-LBPLUS up in the air. Not high enough, but as high as possible.

On a side note, do many people need parts for TS-520S and TS-530S? I am considering selling or parts out them so I can get some money out of them. The TS-520S drifts horribly. Don's seem to see an answer for it.

Chuck
N2KWO

56550. Re: [TS-520_820_530_830] Re: the "Drifter"

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-20 00:25:05 UTC
From: Louis Wilen
Topic: 56528 Message: 56550

Is it drifting or is it sudden jumps in frequency of several Khz?

If it's jumping several Khz suddenly and sporadically, then be sure that the bolts holding the boards in place are reasonably tight. Best to loosen each bolt a few turns, then retighten. Of course, be careful not to strip anything by overtightening.

Louis W3VVV

On 2/19/2017 5:37 PM, croberts@... [TS-520_820_530_830] wrote:
>
> Joe,
> I did try leaving the heaters on. For about 4 days. Still drifts.
>
> As far a whether heaters on/off is no doubt a debate. I beleive
> that most older electoncs does have shorter life is it turned on and
> off a lot. Like light bulbs; they always blow when you turn them on.
>
> But the drifting is extreme. And it is sad to see it.
>
> Chuck
> N2kwo
>
>

56551. Re: [TS-520_820_530_830] Oddity with TS-530SP on 80m and 160m

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-20 01:02:57 UTC
From: Rodger Hough
Topic: 56531 Message: 56551

Chuck:

I recently replaced the 160 and 80 meter caps with some nice 5000 volt rated caps from WestFlorida Components. They cost a whole dollar each. I paralleled two 200 puffs for 160 and used a new 100 for the 80 meter band. While the caps were thicker than the originals there was plenty of room and I used heat shrink over the leads.

73,
Rodger K1HH

> On Feb 19, 2017, at 7:44 PM, fpath fpath fpath@... [TS-520_820_530_830] <TS-520_820_530_830@yahoogroups.com> wrote:
>
>
> Hi Chuck,
>
> I use small heat shrink, the old stuff when over heated may fall apart.
>
> 73s
>
> Dave
> Vk5pdl
> Sent from my HTC
>
> "croberts@... <mailto:croberts@sagamorewoods.com> [TS-520_820_530_830]" <TS-520_820_530_830@yahoogroups.com <mailto:TS-520_820_530_830@yahoogroups.com>> wrote:
>
>
> Another blunder, I must admit. I was looking at the caps for wafer S22-3; 670+100pf and 270pf. I installed the wrong caps. I felt that the caps were too large and thus the air gap capacitor was out in the air.
>
> I need waver S22-2, 390pF+22pF (for 180m) and 100pF (for 80m).
>
> It it a tight spot. I lost some of the fiber tube to isolatat them. Does any know where you can buy that fabric tube insulation?
>
> Thanks for waking me up!!
>
> I felt it was that wafer and caps that I needed caps for but then when I went back to the schematic I wrote down the wrong values.
>
> Thanks so much.
>
> I'll be so happy when I've completed work on these radio's and have a nice, solid radio. I just got my Alpha Delta Parallel Dipole, DX-LBPLUS up in the air. Not high enough, but as

high as possible.
>
>
> On a side note, do many people need parts for TS-520S and TS-530S? I am considering selling or parts out them so I can get some money out of them. The TS-520S drifts horribly. Don's seem to see an answer for it.
>
> Chuck
> N2KWO
>
>
>

56552. Re: the "Drifter"

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-20 01:14:24 UTC
From: croberts@...
Topic: 56528 Message: 56552

Mark,
Makes sense. But I have to draw the line on cracking open the VFO. I just don't have the space, equipmment, etc.
Chuck
N2KWO

56553. Re: the "Drifter"

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-20 01:09:38 UTC
From: croberts@...
Topic: 56528 Message: 56553

Louis,
It drifts. Like a banshee in the wind.

Chuck
N2KWO

56554. Re: Question about proper loading.

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-20 06:05:59 UTC
From: remingtonhill1@...
Topic: 56529 Message: 56554

Terry,

This is fantastic information, thanks a bunch. This will take some study to fully understand.

I have read previous comments you, and I think others have made regarding the load control used for RF output control, and I agree with your conclusions there.

I do have a wattmeter in line (two actually when counting the MFJ-929 autotuner), and I noticed that on several different watt-meters, my rig seems to want to put out around 125W when tuned for Max RF per the manual's tuning instructions, followed to the "T".

This gives an indicated, roughly 260ma of plate current, and about 800-810v (if I remember correctly).

Does that seem right? I'm pretty confident in the measurement as I have used at least 5 separate watt meters with this rig. Otherwise it seems to work perfectly.

73
Shane KG5RJS

56555. Re: Question about proper loading.

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-20 18:49:31 UTC
From: wagstw46@...
Topic: 56529 Message: 56555

Shane:

Most TS530s and TS830s with good tubes and in good state of tune can put out at least 125 watts. Most owners would not routinely load to that level. The manual cautions not to exceed 265ma. I would say answer to your question is Yes what you are seeing is certainly possible. The math below will bare that out.

Remember that Ip is measuring cathode current which includes screen grid current. Also, Ip is only as accurate as the 5 ohm cathode resistors and the 2.7k series meter multiplier resistor. Assuming the resistors are to spec then indicated Ip is probably at best accurate to 5%.

Also, the HV meter divider string resistors quite commonly drift in value so the displayed HV reading is not precise. Yes can use this metering to roughly calculate DC input power, but that isnt is biggest value and because you have HV displayed doesnt mean have any B+ on the Final anodes unless of course you do have good RF output. One of biggest aides of HV meter position with these radios now having 35 to 40 years age on them is being able to tell if you have 450vdc vs 900vdc B+ (one HV cap or two).

Screen grid current at 100 watt out at 225ma is approx 11ma to 12ma per Final tube so can say max of 24ma. So if you subtract SG from Cathode current will have plate current. In your case 260ma - 24ma = 236ma plate current. 800v x .236 = 189 watts dc input. 125/189 = 67% efficiency. Rig is rated for 180 watts dc input power. We dont know your actual screen grid current. It is likely a bit higher than 24ma. In practice you may be slightly exceeding the plate dissipation of the Final tubes from a short term perspective assuming you are loading quickly.

Assuming quick loading the reason it isnt a big deal is the nature of CW and SSB modes. Duty cycle is low. For SSB assuming normal speaking voice and distance to the mic and not running speech processing duty cycle is approx 20% to 25% and for CW duty cycle at 20 wpm is approx 40%. So you can quickly load to 125 watts out and then operate CW or SSB all day without damaging the tubes or measurably shortening their life. I doubt any measurable difference in tube life between loading to 100 watts out at 225ma and loading to 125 watts out at 260ma. However, most folks have been schooled to load to 100 watts at 225ma max. That limit comes from 800v x .225 = 180 cw watts. However, that calc ignores screen grid current.

So in summary, it is not unusual for your radio to be able to produce 125 watts output at 260ma plate current. Also, if you want to routinely load to 125 watt out and can do that quickly not likely to hurt the Finals. However, just remember that loading to 125 watts output gets you nothing on the receiving end. Some may argue that there is acute failure and chronic failure and that routinely loading to 260ma could result in chronic failure. I have no way to refute that and I doubt anyone who espouses that has measurable data. I can only present limits that are clearly stated in the Owners Operating Manual.

Terry K9TW

56556. Re: [TS-520_820_530_830] Re: Question about proper loading.

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-20 17:44:04 UTC
From: Mark Gilger
Topic: 56529 Message: 56556

Shane,

Remember any measurements as far as power need to
be made with the radio hooked to a 50 ohm dummy load.

Mark, WB0IQK

At 01:05 AM 2/20/2017, remingtonhill1@... [TS-520_820_530_830] wrote:
>
>
>Terry,
>
>This is fantastic information, thanks a
>bunch. This will take some study to fully understand.
>
>I have read previous comments you, and I think
>others have made regarding the load control used
>for RF output control, and I agree with your conclusions there.
>
>I do have a wattmeter in line (two actually when
>counting the MFJ-929 autotuner), and I noticed
>that on several different watt-meters, my rig
>seems to want to put out around 125W when tuned
>for Max RF per the manual's tuning instructions, followed to the "T".
>
>This gives an indicated, roughly 260ma of plate
>current, and about 800-810v (if I remember correctly).
>
>Does that seem right? I'm pretty confident in
>the measurement as I have used at least 5
>separate watt meters with this rig. Otherwise it seems to work perfectly.
>
>73
>Shane KG5RJS
>
>
>

56557. Re: How do I test the Rx of a just acquired TS-830s?

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-20 19:52:43 UTC
From: ashoks@...
Topic: 56479 Message: 56557

Thanks for the great info Dave! It's good to know that I don't have to use a tower 100 feet up to get some DX! I don't think my wife or neighbors would appreciate that! I'll set up a good dipole and give it a shot! The tile roof is a good point. My tile is actually concrete. Not sure how transparent that is to RF...

73
Ashok
KM6HMW

56558. Re: How do I test the Rx of a just acquired TS-830s?

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-20 19:55:35 UTC
From: ashoks@...
Topic: 56479 Message: 56558

Hi John, Thanks for the advice. Hmm I have to figure out how to get a decent antenna up in my 40'x125' lot with a 11KV power line to one side..Will try the lower bands as you suggest. Playing with antennas is so much fun though. Haven't tried my rain gutter yet but will!

73
Ashok
KM6HMW

56559. FS: Kenwood TV-506 transverter with cable for sale

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-20 21:05:43 UTC
From: fishtail
Topic: 56559 Message: 56559

FS:Kenwood TV-605 6 meter transverter and cable

I wanted to give the list participants first chance at this before
putting it on the auction site.
I have a very good condition Kenwood TV-605 6 meter transverter with the
"more scarce than
hen's teeth" 12 pin factory cable that I would like to sell. No, I will
not sell just the cable. I have
several pictures I can send via email. The unit lights up but due to
not having the 520 or 520S
I am unable to test any further . Asking $99 shipped CONUS. Please
contact me off list
at fishtail@... or telephone 417-261-1717. My thanks to
this list for the
opportunity for posting.

Vry 73 de NØKO

Randy Fish
RR1 Box 265
Vanzant, Missouri 65768
Address and email verified on QRZ dot com

56560. Re: FS: Kenwood TV-506 transverter with cable for sale

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-20 21:35:37 UTC
From: fishtail
Topic: 56559 Message: 56560

Correction, should be TV-506. My mistake.

On 2/20/2017 3:05 PM, fishtail wrote:
> FS:Kenwood TV-605 6 meter transverter and cable
>
> I wanted to give the list participants first chance at this before
> putting it on the auction site.
> I have a very good condition Kenwood TV-605 6 meter transverter with
> the "more scarce than
> hen's teeth" 12 pin factory cable that I would like to sell. No, I
> will not sell just the cable. I have
> several pictures I can send via email. The unit lights up but due to
> not having the 520 or 520S
> I am unable to test any further . Asking $99 shipped CONUS. Please
> contact me off list
> at fishtail@... or telephone 417-261-1717. My thanks to
> this list for the
> opportunity for posting.
>
> Vry 73 de NØKO
>
> Randy Fish
> RR1 Box 265
> Vanzant, Missouri 65768
> Address and email verified on QRZ dot com
>
>

56561. Re: [TS-520_820_530_830] Re: FS: Kenwood TV-506 transverter with cable for sale

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-21 00:28:01 UTC
From: W LEWIS
Topic: 56559 Message: 56561

Randy,Butch Lewis (KØPSA) here. I'm interested in the transverter and would appreciate the photos if you don't mind.73,Butch LewisKØPSAnscb56a@...

On Monday, February 20, 2017 5:50 PM, "fishtail fishtail@... [TS-520_820_530_830]" <TS-520_820_530_830@yahoogroups.com> wrote:

  Correction, should be TV-506. My mistake.

On 2/20/2017 3:05 PM, fishtail wrote:
> FS:Kenwood TV-605 6 meter transverter and cable
>
> I wanted to give the list participants first chance at this before
> putting it on the auction site.
> I have a very good condition Kenwood TV-605 6 meter transverter with
> the "more scarce than
> hen's teeth" 12 pin factory cable that I would like to sell. No, I
> will not sell just the cable. I have
> several pictures I can send via email. The unit lights up but due to
> not having the 520 or 520S
> I am unable to test any further . Asking $99 shipped CONUS. Please
> contact me off list
> at fishtail@... or telephone 417-261-1717. My thanks to
> this list for the
> opportunity for posting.
>
> Vry 73 de NØKO
>
> Randy Fish
> RR1 Box 265
> Vanzant, Missouri 65768
> Address and email verified on QRZ dot com
>
>

56562. Re:FS:Kenwood TV-506 6 meter transverter and cable

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-21 04:26:01 UTC
From: fishtail
Topic: 56562 Message: 56562

The Kenwood TV-506 with cable has been sold.
Thank you to all who responded and to the list.

'73
de NØKO - Randy Fish
Vanzant, Missouri 65768

56563. TS-520SE Drive setting different for Tx and Rx !

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-23 04:43:19 UTC
From: jweder@...
Topic: 56563 Message: 56563

I just finished doing quite a bit of work on a TS-520SE, including replacing electrolytics, some panel lamps, etc. Overall the rig is working very well now. But I just noticed one issue that I can't explain. I've been doing a fair bit of reading but no good hints yet.

In tuning up the transmitter I'll adjust the Drive for maximum ALC while in Tune. The rig tunes up just fine, getting a bit over 100 watts out at 225 mA plate current. But when receiving afterwards I can tell the receiver is a bit deaf. So I tweak the Drive control and find that the best position for a peaked receive level is 10-20 degrees away from the best setting for Tx.

Any thoughts on this would be greatly appreciated!

Joel, VE6EI

56564. Re: TS-520SE Drive setting different for Tx and Rx !

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-23 15:50:39 UTC
From: n4jhy@...
Topic: 56563 Message: 56564

Sure looks like it is alignment time. Might be just that band, so check for this situation on other bands.
Best luck, Bruce N4JHY

56565. Re: [TS-520_820_530_830] TS-520SE Drive setting different for Tx and Rx !

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-23 17:21:30 UTC
From: John Davidson
Topic: 56563 Message: 56565

The peak of the receiver RF stage and Transmitter driver can occur at different points of the tuning capacitors behind the drive tuning knob, if an alignment is needed. Make sure you do the transmitter driver (IPA) and receiver front end tuning with the main VFO tuning set to the same point . My radio is Ham Radio...CW is Real Radio 73, John...K8JD

From: "jweder@... [TS-520_820_530_830]" <TS-520_820_530_830@yahoogroups.com>
To: TS-520_820_530_830@yahoogroups.com
Sent: Wednesday, February 22, 2017 11:43 PM
Subject: [TS-520_820_530_830] TS-520SE Drive setting different for Tx and Rx !

I just finished doing quite a bit of work on a TS-520SE, including replacing electrolytics, some panel lamps, etc. Overall the rig is working very well now. But I just noticed one issue that I can't explain. I've been doing a fair bit of reading but no good hints yet.

In tuning up the transmitter I'll adjust the Drive for maximum ALC while in Tune. The rig tunes up just fine, getting a bit over 100 watts out at 225 mA plate current. But when receiving afterwards I can tell the receiver is a bit deaf. So I tweak the Drive control and find that the best position for a peaked receive level is 10-20 degrees away from the best setting for Tx.

Any thoughts on this would be greatly appreciated!

Joel, VE6EI

56566. Re: TS-520SE Drive setting different for Tx and Rx !

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-23 21:17:54 UTC
From: wagstw46@...
Topic: 56563 Message: 56566

Go to my website(www k9tw dot com) and look under How to Guides on how to align the Drive coils. Very easy procedure. Only the 530 and 830 Service Manuals direct this method, but the verbiage is may be a bit cryptic if new to KW Hybrids.

Make sure you follow the band and frequency chart in the sequence directed. Do not skip around.

First inspect VC-1, VC-2, and VC-3 to make sure that the movable plates are all opening and closing in sync. Full open you should not be able to lightly press on the plates and see any movement toward the stops. It is unusual for the upper chain drive sprockets to slip on the drive shaft or for the spring wire chain tensioners to have lost tension.

Terry K9TW

56567. Re: TS-520SE Drive setting different for Tx and Rx !

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-24 03:38:28 UTC
From: jweder@...
Topic: 56563 Message: 56567

Thanks Terry (and all). I found a copy of your document on this topic about an hour after I wrote my query yesterday! I'll work through the alignment and see what I did wrong the first time.

Joel, VE6EI

56568. Re: TS-520SE Drive setting different for Tx and Rx !

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-24 05:47:09 UTC
From: jweder@...
Topic: 56563 Message: 56568

Just finished the Drive coil alignment using Terry's process. The Drive position now does fairly well match up between best Rx sensitivity and peak ALC level when tuning. Still not quite perfect but much better. I might do a full alignment at some point but it's good enough for now!

Thanks again!

Joel, VE6EI

56569. The next Dayton??

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-24 16:47:16 UTC
From: Rich Jones
Topic: 56569 Message: 56569

de Rich K8UV in SE Michigan

- The most exciting ham radio event to ever hit Michigan has been scheduled for October 7 & 8,2017 at Michigan International Speedway (MIS) near Brooklyn, Michigan.MIS is located in the vacation area of Southeastern Michigan known as the Irish Hills. The racetrack is the home of two NASCAR races each year (June & October) and other non-racing events and is near major highways and air transportation. The facility is comprised of 1400 acres in the rolling hills of SE Michigan.The entire event will be held in the infield of the 2 mile track with lots of asphalt surfaces in the pit area. We have 22,500 square feet of indoor area for commercial vendors and a huge paved area for flea market space. All types of camping on site are available (tents to pop up campers to fifth wheels to full blown motor homes) with 24 hour security services. Medical personnel will be on site during the entire event for your safety. The facility will be open on Friday, Oct 6 for vendor load in and set up. Load out will be on Sunday, Oct 8) at the close of the event. All activity should be complete by 2100 Sunday evening.Food services will be available and ticketing will be available electronically. There will be a complete complement of commercial vendors and many forums and workshops, including a ham in a day class taught by Dan, KB6NU. This class will be followed by a VE session which will be open to anyone interested in testing for a new license or an upgrade.There are a great number of details that are still in the process of being developed. We are assembling our team to plan and operate the HamCon in conjunction with participating amateur radio clubs in roughly a 50 mile radius of the track. Our organization is the Great Lakes Amateur Radio Association, which will be a 501 (c) (3) non-profit corporation. Our website is www.glhamcon.org and we are on Facebook as Great Lakes Ham Convention and our Twitter ID is GLHamCon. All of our social media is in the process of being developed and will be fleshed out as things develop. Scott Westerman, W9WSW is heading up our Social Media efforts.

56570. R599A with Hum

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-24 22:52:10 UTC
From: drew@...
Topic: 56570 Message: 56570

Hi All,

New here. I am cleaning up a R599A I just acquired and one issue is a fair amount of 60Hz hum in headphones. Not noticable on speaker. The power supply is clean - new caps, under half a mV of ripple.

If I short the audio board input to ground, still the same hum.

Is this typical of this RX? I could pad down the headphone jack further, but I want to address any legit issue first.

73,
Drew K3PA

56571. Re: [TS-520_820_530_830] R599A with Hum

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-24 23:51:47 UTC
From: John Davidson
Topic: 56570 Message: 56571

I have a few items that have a low 60 Hz hum in the background with earphones that are kind of sensitive. Since I have a few stereo earphones with built in volume controls, I turn up the volume on the receiver and turn down the earphone control and, Problem SOLVED.Unplugging the earphones with this volume setting only has a modest speaker volume so I am not cranking the actual output very high and there is no distortion at all. If you don't have controlled earphones try connecting a 100 Ohm 1/2 W resistor to the audio output wire that was going to the earphone jack and the other end of the resistor to the place on the earphone jack that the wire was on. If the original circuit already has a series resistor, remove it and replace with 470 or 680 Ohms.My radio is Ham Radio...CW is Real Radio 73, John...K8JD

From: "drew@whisperingwoods.org [TS-520_820_530_830]" <TS-520_820_530_830@yahoogroups.com>
To: TS-520_820_530_830@yahoogroups.com
Sent: Friday, February 24, 2017 5:52 PM
Subject: [TS-520_820_530_830] R599A with Hum

  Hi All,
New here. I am cleaning up a R599A I just acquired and one issue is a fair amount of 60Hz hum in headphones. Not noticable on speaker. The power supply is clean - new caps, under half a mV of ripple.
If I short the audio board input to ground, still the same hum.
Is this typical of this RX? I could pad down the headphone jack further, but I want to address any legit issue first.
73,Drew K3PA

56572. No Bias Voltage Reading 520S

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-25 21:03:04 UTC
From: brian.e.mee@...
Topic: 56572 Message: 56572

Started tuning up to get on today's Hybrid Net (first time) and can't get any mA IP reading at all on the bias step when TUN into a 50 ohm dummy load. Worked fine last night and could do all the tuneup steps,on dip the plate etc. just fine.

Today, fuse is OK, SG switch is ON air coming out the fan is cool. I have the operating manual and the repair manual if needed.

So for today put me down as just listening in today with a TS-520S on the net. I can hear most everyone fine on my homebrew 40M dipole in Manassas VA.

Brian
KM4TAP

56573. Re: [TS-520_820_530_830] R599A with Hum

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-25 17:26:21 UTC
From: drew@...
Topic: 56570 Message: 56573

Thanks John. As noted, padding the output is an option, but I want to get it reasonably clean first and was wondering what to expect based on others experience with the RX.

Anyone know where to find the VHF converters, or a speaker?

73,
Drew K3PA

---In TS-520_820_530_830@yahoogroups.com, <k8jd@...> wrote :

I have a few items that have a low 60 Hz hum in the background with earphones that are kind of sensitive. Since I have a few stereo earphones with built in volume controls, I turn up the volume on the receiver and turn down the earphone control and, Problem SOLVED.
Unplugging the earphones with this volume setting only has a modest speaker volume so I am not cranking the actual output very high and there is no distortion at all.
If you don't have controlled earphones try connecting a 100 Ohm 1/2 W resistor to the audio output wire that was going to the earphone jack and the other end of the resistor to the place on the earphone jack that the wire was on.
If the original circuit already has a series resistor, remove it and replace with 470 or 680 Ohms.
My radio is Ham Radio...CW is Real Radio 73, John...K8JD

From: "drew@... [TS-520_820_530_830]" <TS-520_820_530_830@yahoogroups.com>
To: TS-520_820_530_830@yahoogroups.com
Sent: Friday, February 24, 2017 5:52 PM
Subject: [TS-520_820_530_830] R599A with Hum

Hi All,

New here. I am cleaning up a R599A I just acquired and one issue is a fair amount of 60Hz hum in headphones. Not noticable on speaker. The power supply is clean - new caps, under half a mV of ripple.

If I short the audio board input to ground, still the same hum.

Is this typical of this RX? I could pad down the headphone jack further, but I want to address any legit issue first.

73,
Drew K3PA

56574. Re: [TS-520_820_530_830] R599A with Hum

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-26 01:32:26 UTC
From: pmarkavage@...
Topic: 56570 Message: 56574

You might also check and/or replace the C10, 220 mfd, 16 volt coupling cap on the audio board. If it's leaky, more hum will be present, especially with headphones. As indicated, headphones today are far more sensitive and generally have a wider range of frequency response. There are two 56 ohm resistors in each leg of the headphone jack. I changed both of mine to 100 ohms. Obviously, having a scope would help pinpoint if the hum is being generated in other parts of the audio chain.

Finding the VHF converters could be a real challenge. It took me several different stores to find each converter right after the "D" Twins were discontinued. The converters were early 70's design with horrible noise figures. By today's standards, they are terrible. If you're building handy, homebrew should work better and the components won't be almost 50 years old. Finding a matching speaker by itself would also be a challenge.
Pete, wa2cwa

---In TS-520_820_530_830@yahoogroups.com, <drew@...> wrote :

Thanks John. As noted, padding the output is an option, but I want to get it reasonably clean first and was wondering what to expect based on others experience with the RX.

Anyone know where to find the VHF converters, or a speaker?

73,
Drew K3PA

56575. Alignment Tool 2mm?

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-25 22:02:14 UTC
From: drew@...
Topic: 56575 Message: 56575

Hi,

I must have 20 alignment tools, but not one of them fits the slugs in my R599. Using mechanical tools, I can see that 2mm fits perfectly. Where can I find a 2mm plastic alignment tool?

73,
Drew K3PA

56576. Re: No Bias Voltage Reading 520S

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-26 03:38:50 UTC
From: remingtonhill1@...
Topic: 56572 Message: 56576

Based on my limited experience I'd fiddle with the bandswitch - had similar problem when mine was dirty.

73
Shane KG5RJS

56577. Rig chasis ground

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-26 03:34:47 UTC
From: Mark Lunday
Topic: 56577 Message: 56577

How are folks these days grounding the chasis of their older 520 radios? This hybrid has a two-prong plug. I seem to remember an electrical bite from the chasis about 40 many years ago when I first got the rig was in a two-prong older house, and I leaned against the rig and some other device that had a different potential. No harm done, just surprised me.

So with newer homes and 3-pring outlets for safety, how should we deal with two-prong plugged gear and still obtain a chasis ground?

I know the answer is NOT to run a length of wire from the electrical ground lug to an outside ground rod. Been there, done that, ended up with a radiating element from that 30 foot wire.

And this ain't no lightning protection either, been down that path also.

Just looking for ideas on how to put a square peg in a round hole and keep it safe.

Mark Lunday, WD4ELG
Greensboro, NC FM06be
wd4elg@arrl.net
http://wd4elg.blogspot.com
SKCC #16439 FISTS #17972

56578. Re: [TS-520_820_530_830] R599A with Hum

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-26 01:46:47 UTC
From: Brenton Meadows
Topic: 56570 Message: 56578

We used to assume most radios that hummed just didnt know the words to the song ☐
Cheers
Brenton
VK3CM
Tangambalanga Victoria
Australia

On Sun, Feb 26, 2017 at 12:32 PM, pmarkavage@... [TS-520_820_530_830] <TS-520_820_530_830@yahoogroups.com> wrote:

>
>
> You might also check and/or replace the C10, 220 mfd, 16 volt coupling cap
> on the audio board. If it's leaky, more hum will be present, especially
> with headphones. As indicated, headphones today are far more sensitive and
> generally have a wider range of frequency response. There are two 56 ohm
> resistors in each leg of the headphone jack. I changed both of mine to 100
> ohms. Obviously, having a scope would help pinpoint if the hum is being
> generated in other parts of the audio chain.
>
> Finding the VHF converters could be a real challenge. It took me several
> different stores to find each converter right after the "D" Twins were
> discontinued. The converters were early 70's design with horrible noise
> figures. By today's standards, they are terrible. If you're building handy,
> homebrew should work better and the components won't be almost 50 years
> old. Finding a matching speaker by itself would also be a challenge.
> Pete, wa2cwa
>
>
> ---In TS-520_820_530_830@yahoogroups.com, <drew@...> wrote :
>
> Thanks John. As noted, padding the output is an option, but I want to get
> it reasonably clean first and was wondering what to expect based on others
> experience with the RX.
>
> Anyone know where to find the VHF converters, or a speaker?
>
> 73,
> Drew K3PA
>
>
>

56579. Re: [TS-520_820_530_830] Alignment Tool 2mm?

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-26 06:22:46 UTC
From: Victor
Topic: 56575 Message: 56579

Hello, Drew. I use this one
itm/7PCS-Full-Type-Adjust-frequency-Screwdriver-Anti-static-Ceramic-Set-Hand-Tools-/162104796497?nav=SEARCH
--
73/72 - Victor, UA1CEX, KO49tl. воскресенье, 26 февраля 2017г., 01:02 +03:00 от drew@whisperingwoods.org [TS-520_820_530_830] TS-520_820_530_830@yahoogroups.com :

>
>Hi,
>
>I must have 20 alignment tools, but not one of them fits the slugs in my R599. Using mechanical tools, I can see that 2mm fits perfectly. Where can I find a 2mm plastic alignment tool?
>
>73,
>Drew K3PA
>

56580. Re[2]: [TS-520_820_530_830] Alignment Tool 2m m?

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-26 06:25:28 UTC
From: Victor
Topic: 56575 Message: 56580

Sorry, link was not correct.
m.ebay.com/sch/i.html?_nkw=ceramic+screwdriver&isNewKw=1&isRefine=true&mfs=KWCLK&acimp=0&_trksid=p2055413.m2428.l1311.R1.TR12.TRC2.Xceramic+sc&sqp=ceramic+sc
--
73/72 - Victor, UA1CEX, KO49tl. воскресенье, 26 февраля 2017г., 09:22 +03:00 от Victor ua1cex@mail.ru [TS-520_820_530_830] TS-520_820_530_830@yahoogroups.com :

>
>Hello, Drew. I use this one
>itm/7PCS-Full-Type-Adjust-frequency-Screwdriver-Anti-static-Ceramic-Set-Hand-Tools-/162104796497?nav=SEARCH
>--
>73/72 - Victor, UA1CEX, KO49tl. воскресенье, 26 февраля 2017г., 01:02 +03:00 от drew@whisperingwoods.org [TS-520_820_530_830] TS-520_820_530_830@yahoogroups.com :
>
>>
>>Hi,
>>
>>I must have 20 alignment tools, but not one of them fits the slugs in my R599. Using mechanical tools, I can see that 2mm fits perfectly. Where can I find a 2mm plastic alignment tool?
>>
>>73,
>>Drew K3PA
>

56581. Re: [TS-520_820_530_830] Rig chasis ground

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-26 18:53:11 UTC
From: John Davidson
Topic: 56577 Message: 56581

Don't safety minded people strap all chassis in the radio op area, together and to a common ground ? with flat braid cables? My radio is Ham Radio...CW is Real Radio 73, John...K8JD

From: "Mark Lunday wd4elg@outlook.com [TS-520_820_530_830]"
<TS-520_820_530_830@yahoogroups.com>
To: TS-520_820_530_830@yahoogroups.com
Sent: Saturday, February 25, 2017 10:34 PM
Subject: [TS-520_820_530_830] Rig chasis ground

How are folks these days grounding the chasis of their older 520 radios? This hybrid has a two-prong plug. I seem to remember an electrical bite from the chasis about 40 many years ago when I first got the rig was in a two-prong older house, and I leaned against the rig and some other device that had a different potential. No harm done, just surprised me.

So with newer homes and 3-pring outlets for safety, how should we deal with two-prong plugged gear and still obtain a chasis ground?

I know the answer is NOT to run a length of wire from the electrical ground lug to an outside ground rod. Been there, done that, ended up with a radiating element from that 30 foot wire.

And this ain't no lightning protection either, been down that path also.

Just looking for ideas on how to put a square peg in a round hole and keep it safe.

Mark Lunday, WD4ELG
Greensboro, NC FM06be
wd4elg@...
http://wd4elg.blogspot.com
SKCC #16439 FISTS #17972

56582. Re: Rig chasis ground

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-26 09:50:21 UTC
From: cableguy290@...
Topic: 56577 Message: 56582

Morning!, I have a 520 here in the UK with just live and neutral connection. I have connected a wire from the ground lug down to a copper stake outside for earthing protection and havent had any problems with EMC or radiation (not that I have noticed anyway?) I have however felt the half mains potential if have have touched the chassis and another rig before I connected the earth lead. Not sure if this is of any help to you, but thought I would share my experiences of what I did. 73's Steve M6 PTS

56583. 36.895 MHz crystal.

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-26 10:27:28 UTC
From: drew@...
Topic: 56583 Message: 56583

Yet another part in needed for the R599 project. No 28.0 Mhz band receive, which I suspect will be a bad LO crystal. 36.895 MHz.

Does anyone have a spare or a source for these? I got high quote online, for a custom order, I suppose.

73,
Drew K3PA

56584. Re: Re[2]: [TS-520_820_530_830] Alignment Tool 2m m?

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-26 10:24:07 UTC
From: drew@...
Topic: 56575 Message: 56584

Thanks Victor, but this is a hex tool for slugs. I think it is the same size as 0.078 inch. I found one on eBay.

56585. Re: Rig chasis ground

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-26 14:17:26 UTC
From: croberts@...
Topic: 56577 Message: 56585

Mark,
I have also felt the tingles from my rigs. Surprising and annoying. But all I can suggest is to switch the prongs of the wire. One is going to the neutral. I've taken to swapping out my cords with the ones that are polarized (one prong is larger than the other).

If it is an old house the check if neutral is where it should be with a checker. A lot of people put in new plugs and think that fixes the problem. But in this house each line (breaker/fuse) can be different. In that case then I shut down that line and swap it if I can. If I can't then swap out each of the plugs in that line. It's a pain.

I see people selling the 520/820 plugs with the ground plug, but I have no idea where the ground wire is attached to the rig. I believe that are not connected.

Chuck
N2KWO

56586. Re: [TS-520_820_530_830] No Bias Voltage Reading 520S

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-26 10:32:19 UTC
From: chris hender
Topic: 56572 Message: 56586

I have had this issue as well except that I get no receive also....after about 10 mins it seems to sort itself out and all seems well again. I've changed all electrolytics and checked all switch contacts. Best of luck.

Chris G4HYV

From: TS-520_820_530_830@yahoogroups.com <TS-520_820_530_830@yahoogroups.com> on behalf of brian.e.mee@gmail.com [TS-520_820_530_830] <TS-520_820_530_830@yahoogroups.com>
Sent: 25 February 2017 21:03
To: TS-520_820_530_830@yahoogroups.com
Subject: [TS-520_820_530_830] No Bias Voltage Reading 520S

Started tuning up to get on today's Hybrid Net (first time) and can't get any mA IP reading at all on the bias step when TUN into a 50 ohm dummy load. Worked fine last night and could do all the tuneup steps,on dip the plate etc. just fine.

Today, fuse is OK, SG switch is ON air coming out the fan is cool. I have the operating manual and the repair manual if needed.

So for today put me down as just listening in today with a TS-520S on the net. I can hear most everyone fine on my homebrew 40M dipole in Manassas VA.

Brian
KM4TAP

56587. Hybrid Net Update (February 26, 2017)

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-26 19:26:46 UTC
From: Mark Gilger
Topic: 56587 Message: 56587

Net Info:
Saturday: 7.235 ☐ 7.233 @ 3:30pm Eastern following the Swan Tech Net
Sunday: 14.316 @ 1800 UTC following the ICOM net

Web Site:
<http://www.wb4hfn.com/KENWOOD/KenwoodHomePage.htm>http://www.wb4hfn.com/KENWOOD/KenwoodHomePage.htm

The net started its existence on November 1st,
2011. The yearly check-in totals are posted at the bottom of this message.

The Saturday net was run by me, WB0IQK. There
were 15 stations checking in under GOOD band conditions.

We had the following number of radios checking in.
2 running TS-520(x)
4 running TS-530(x)
3 running TS-820(x)
5 running TS-830S
0 running TS-510
0 running TS-511
0 running TS-515
1 running 599 twins
0 running TS-900

I was running my TS-830S + Drake L4B amplifier.

The Sunday net was run by me, WB0IQK. There were
20 stations checking in under GOOD band conditions.

We had the following number of radios checking in.
2 running TS-520(x)
1 running TS-530(x)
0 running TS-820(x)
6 running TS-830S
0 running TS-510
0 running TS-511
0 running TS-515
0 running 599 twins
0 running TS-900

I was running my TS-830S + Drake L-4B amplifier.

We have been having several people checking in
regularly with their TS-430, TS-440, and
TS-940☐s, which of course is not a hybrid,
although over 30+ years old. Everyone is welcome

as long as they have an interest in the older equipment.

If anyone would be interested in filling in as a
net control station, please send me an email.
Currently it's just myself, Jimmy, WB2KNR, and
Greg, WQ0P, and Rodger, K1HH has agreed to help
with relays . I would like to get several more.
If we do, we can alternate so everyone might be
on a 3-4 week rotation. It's a lot of fun and a
good way to make sure you station is optimized.

For anyone that has not heard, we have a new web
site that WB4HFN is hosting. He currently has a
very nice site for Drake, Collins and Heathkit
and now Kenwood Hybrids. Good quality manuals
plus sale flyers and brochures will be found
here, along with user supplied information for all Hybrids.

His URL is:
<http://www.wb4hfn.com/KENWOOD/KenwoodHomePage.htm>http://www.wb4hfn.com/KENWOOD/KenwoodHo
mePage.htm

To date, we have had the following check-in:

Nov. 2011 ☐ Oct. 2012 Saturday total 754
check-ins, Sunday total 563 check-ins
Nov. 2012 - Oct. 2013 Saturdays total 828 check-ins, Sunday total 609 check-ins
Nov. 2013 - Oct. 2014 Saturdays total 842 check-ins, Sunday total 744 check-ins
Nov. 2014 ☐ Oct 2015 Saturdays total 962 check-ins, Sunday total 669 check-ins
Nov. 2015 ☐ Oct 2016 Saturdays total 807 check-ins, Sunday total 628 check-ins

November 2016, Saturday net total = 80, Sunday total = 68
December 2016, Saturday net total = 73, Sunday total = 69
January 2017, Saturday net total = 50, Sunday total = 90
February 2017, Saturday net total = 85, Sunday total = 66 (Month to date)

Net Info:
Saturday: 7.235 @ 3:30 Eastern following the Swan Tech Net
Sunday: 14.316 @ 1800 UTC following the ICOM net

Web Site:
<http://www.wb4hfn.com/KENWOOD/KenwoodHomePage.htm>http://www.wb4hfn.com/KENWOOD/KenwoodHo
mePage.htm

73's,
Mark, WB0IQK

56588. Re: [TS-520_820_530_830] No Bias Voltage Reading 520S

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-26 20:31:22 UTC
From: wagstw46@...
Topic: 56572 Message: 56588

I am sorry, but bandswitch contacts and electrolytic capacitors have nothing to do with setting zero signal plate current to 60ma.

Assuming Final tube filaments not open and heaters are on and have good SG and Plate voltage then most likely problem is that cutoff bias is not switching to operating bias on the Final tube control grids when you flip to Send.

The most common reason is that the RLK lead is not switching to ground due to bad contact in RL-1 aux control relay. RLK grounds the VR-3 leg of the bias voltage adjust pot. See the schematic.

Measure the bias voltage at Final tube socket solder lug 5. In RX the cutoff bias should be approx -100vdc and when flip to Send you should see it go to approx -55vdc (assuming a good clean bias voltage adjust pot that is set properly).

If it doesnt switch to operating bias you can flip to Send and temporarily ground the RLK wire wrap terminal post on the RF board. If the bias voltage now goes to -55vdc then pull RL-1 and measure and clean the contacts.

This problem was recently addressed.

Terry K9TW

56589. Re: [TS-520_820_530_830] No Bias Voltage Reading 520S

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-26 21:55:42 UTC
From: wagstw46@...
Topic: 56572 Message: 56589

See Message 56503 and related.

If temporarily grounding wire wrap post RLK doesnt fix the problem come back for additional help. Report what you see on the control grids.

Terry K9TW

56590. Re: [TS-520_820_530_830] 36.895 MHz crystal.

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-26 22:10:16 UTC
From: Walter Dilley
Topic: 56583 Message: 56590

There is also a 36.895 crystal (X5, L77-0145-05) on the OSC Coil Unit board
in the TS-520.
Anyone know of a reason why this would not be an acceptable substitute?
(Trying to think of an alternate source.)

I'll see if I have one on a parts unit. (I have a large inventory of parts
for our Hybrid radio series.)

Drew, have you checked the switch for continuity?

Walter, kd7dny

On Sun, Feb 26, 2017 at 3:27 AM, drew@...
[TS-520_820_530_830] <TS-520_820_530_830@yahoogroups.com> wrote:

>
>
> Yet another part in needed for the R599 project. No 28.0 Mhz band
> receive, which I suspect will be a bad LO crystal. 36.895 MHz.
>
>
> Does anyone have a spare or a source for these? I got high quote online,
> for a custom order, I suppose.
>
>
> 73,
>
> Drew K3PA
>
>
>
>

56591. Low volume

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-26 20:45:14 UTC
From: Joe
Topic: 56591 Message: 56591

Hello, my name is Joe Ve7lsb
I have a ts-530 with low volume. I wonder if anyone would have any ideas what to look for?
Volume turned up full is at about 10-15 percent of normal

Thank you
Joe

56592. Re: [TS-520_820_530_830] Rig chasis ground

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-27 00:32:32 UTC
From: Lou Everett, Sr.
Topic: 56577 Message: 56592

That is a little dangerous because you can set up a ground loop that way.
Each piece of gear should be individually wired to a grounding bar. Then
the grounding bar gets wired to an external ground. Much safer and works
better, too. Tying all pieces together like that can bring much damage.
Be careful.

Lou Everett, Sr., WA5LOU

On Sun, Feb 26, 2017 at 1:53 PM, John Davidson k8jd@...
[TS-520_820_530_830] <TS-520_820_530_830@yahoogroups.com> wrote:

>
>
> Don't safety minded people strap all chassis in the radio op area, t
> ogether and to a common ground ? with flat braid cables?
>
> My radio is Ham Radio...CW is Real Radio 73, John...K8JD
>
>
> ------------------------------
> *From:* "Mark Lunday wd4elg@... [TS-520_820_530_830]" <
> TS-520_820_530_830@yahoogroups.com>
> *To:* TS-520_820_530_830@yahoogroups.com
> *Sent:* Saturday, February 25, 2017 10:34 PM
> *Subject:* [TS-520_820_530_830] Rig chasis ground
>
>
> How are folks these days grounding the chasis of their older 520 radios?
> This hybrid has a two-prong plug. I seem to remember an electrical bite
> from the chasis about 40 many years ago when I first got the rig was in a
> two-prong older house, and I leaned against the rig and some other device
> that had a different potential. No harm done, just surprised me.
>
> So with newer homes and 3-pring outlets for safety, how should we deal
> with two-prong plugged gear and still obtain a chasis ground?
>
> I know the answer is NOT to run a length of wire from the electrical
> ground lug to an outside ground rod. Been there, done that, ended up with a
> radiating element from that 30 foot wire.
>
> And this ain't no lightning protection either, been down that path also.
>
> Just looking for ideas on how to put a square peg in a round hole and keep
> it safe.
>
> Mark Lunday, WD4ELG

> Greensboro, NC FM06be
> wd4elg@...
> http://wd4elg.blogspot.com
> SKCC #16439 FISTS #17972
>
>
>
>

56593. RE: [TS-520_820_530_830] Rig chasis ground

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-26 19:27:27 UTC
From: kenny macdougall
Topic: 56577 Message: 56593

Hi all In the UK we are 240 volt, I bit more to worry about than your 110 v.

Cheers

Kenny

Scotland

From: TS-520_820_530_830@...m [mailto:TS-520_820_530_830@yahoogroups.com]
Sent: 26 February 2017 18:53
To: TS-520_820_530_830@yahoogroups.com
Subject: Re: [TS-520_820_530_830] Rig chasis ground

Don't safety minded people strap all chassis in the radio op area, t

ogether and to a common ground ? with flat braid cables?

My radio is Ham Radio...CW is Real Radio 73, John...K8JD

From: "Mark Lunday wd4elg@... [TS-520_820_530_830]" <TS-520_820_530_830@yahoogroups.com>
To: TS-520_820_530_830@yahoogroups.com
Sent: Saturday, February 25, 2017 10:34 PM
Subject: [TS-520_820_530_830] Rig chasis ground

How are folks these days grounding the chasis of their older 520 radios? This hybrid has a two-prong plug. I seem to remember an electrical bite from the chasis about 40 many years ago when I first got the rig was in a two-prong older house, and I leaned against the rig and some other device that had a different potential. No harm done, just surprised me.

So with newer homes and 3-pring outlets for safety, how should we deal with two-prong plugged gear and still obtain a chasis ground?

I know the answer is NOT to run a length of wire from the electrical ground lug to an outside ground rod. Been there, done that, ended up with a radiating element from that 30 foot wire.

And this ain't no lightning protection either, been down that path also.

Just looking for ideas on how to put a square peg in a round hole and keep it safe.

Mark Lunday, WD4ELG
Greensboro, NC FM06be
wd4elg@...
http://wd4elg.blogspot.com
SKCC #16439 FISTS #17972

[Non-text portions of this message have been removed]

56594. Re: [TS-520_820_530_830] 36.895 MHz crystal.

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-27 14:57:32 UTC
From: drew@...
Topic: 56583 Message: 56594

That 520 crystal should be fine, if the size is similar. (The small wired ones) Basically the same application. So if you happen to have one, maybe you'd like to sell it?

The bandswitch itself seems to be OK.

I bet that crystal is not fun to get to. I haven't studied the issue yet, but since the bandswitch runs through all those boards....yikes. Anyone ever removed one on a R599A? How bad is it to do?

73,
Drew K3PA

---In TS-520_820_530_830@yahoogroups.com, <walter.dilley@...> wrote :

There is also a 36.895 crystal (X5, L77-0145-05) on the OSC Coil Unit board in the TS-520. Anyone know of a reason why this would not be an acceptable substitute? (Trying to think of an alternate source.)

I'll see if I have one on a parts unit. (I have a large inventory of parts for our Hybrid radio series.)

Drew, have you checked the switch for continuity?

Walter, kd7dny

On Sun, Feb 26, 2017 at 3:27 AM, drew@... mailto:drew@... [TS-520_820_530_830] <TS-520_820_530_830@yahoogroups.com mailto:TS-520_820_530_830@yahoogroups.com> wrote:

Yet another part in needed for the R599 project. No 28.0 Mhz band receive, which I suspect will be a bad LO crystal. 36.895 MHz.

Does anyone have a spare or a source for these? I got high quote online, for a custom order, I suppose.

73,
Drew K3PA

56595. Re: [TS-520_820_530_830] Low volume

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-27 18:21:42 UTC
From: John Davidson
Topic: 56591 Message: 56595

Is it also low with headphones or an external speaker plugged in ? My radio is Ham Radio...CW is Real Radio 73, John...K8JD

From: "Joe outwestcw@... [TS-520_820_530_830]" <TS-520_820_530_830@yahoogroups.com>
To: TS-520_820_530_830@yahoogroups.com
Sent: Sunday, February 26, 2017 3:45 PM
Subject: [TS-520_820_530_830] Low volume

Hello, my name is Joe Ve7lsb
I have a ts-530 with low volume. I wonder if anyone would have any ideas what to look for? Volume turned up full is at about 10-15 percent of normal

Thank you
Joe

56596. Re: [TS-520_820_530_830] Rig chasis ground

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-27 18:37:49 UTC
From: John Davidson
Topic: 56577 Message: 56596

What I should have said , grounding each piece of gear to a common conductor (ground bar) then connect that to an earth ground (Very) close by, with a heavy guage wire. I did not mean "daisy chain" grounding ! , just wanted to indicate all should be grounded to a same potential, to get them all to Zero volts.. My radio is Ham Radio...CW is Real Radio 73, John...K8JD

From: "'Lou Everett, Sr.' loueverettsr@... [TS-520_820_530_830]"
<TS-520_820_530_830@yahoogroups.com>
To: TS-520_820_530_830@yahoogroups.com
Sent: Sunday, February 26, 2017 7:32 PM
Subject: Re: [TS-520_820_530_830] Rig chasis ground

  That is a little dangerous because you can set up a ground loop that way. Each piece of gear should be individually wired to a grounding bar. Then the grounding bar gets wired to an external ground. Much safer and works better, too. Tying all pieces together like that can bring much damage. Be careful.

Lou Everett, Sr., WA5LOU

__._,What I ment was grounding to a

56597. Re: [TS-520_820_530_830] Low volume

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-27 19:40:53 UTC
From: Lou Blasco
Topic: 56591 Message: 56597

Hi Joe,

As John has already pointed out you should check the headphone socket, and external speaker socket. If you find nothing there then you will need to pull out the circuit and chase the audio on the AF board. Looks like the important signals are DET, AV2, AV3 and SP.

Regards

Lou
VK3ALB

At 07:45 27/02/2017, you wrote:
>
>
>
>
>Hello, my name is Joe Ve7lsb
>I have a ts-530 with low volume. I wonder if anyone would have any
>ideas what to look for?
>Volume turned up full is at about 10-15 percent of normal
>
>Thank you
>Joe

56598. Re: [TS-520_820_530_830] Low volume

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-28 01:32:36 UTC
From: Joe
Topic: 56591 Message: 56598

Hi , in between posting my message and replying ..I took some electric clean and cleaned a few pots and wafer switches and replaced the filter caps and (surprising to me) I have more volume.

I did run into another problem though, while going thru the tuning procedure (strictly by the book) on 20 meters into a dummy load, I heard a bang like a firecracker.
I checked all over to see if I could find a cap that let go, but could find anything..
I tried tuning up again and heard the same thing...
Looked all over very carefully again and couldn't find anything wrong except one end of a rectifier cap (33uf 160volt) was not soldered properly and was loose.

I'm puzzled as to the bang sound ☐

...I should add that after the "bang" I cannot peak the drive. The needle stays at the bottom (zero) :/

Thank you for any help
Joe

56599. Re: [TS-520_820_530_830] Low volume

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-28 05:36:49 UTC
From: Joseph Stiles
Topic: 56591 Message: 56599

Joe,
It is quite possible that the "bang" you heard was one or more cathode resistors on the final board...letting out their smoke. These resistors are numbered R2, R3, R4, and R5 (and are 20 ohms each) on the schematic of the final board which you can find in the Service Manual. They should measure very close to 5 ohms to ground, anything more than about 5.5+ ohms...is at the upper limit of tolerance and should be considered for replacement
 73
Joe wb7uqu

On Monday, February 27, 2017 9:21 PM, "Joe outwestcw@... [TS-520_820_530_830]" <TS-520_820_530_830@yahoogroups.com> wrote:

  Hi , in between posting my message and replying ..I took some electric clean and cleaned a few pots and wafer switches and replaced the filter caps and (surprising to me) I have more volume.

I did run into another problem though, while going thru the tuning procedure (strictly by the book) on 20 meters into a dummy load, I heard a bang like a firecracker.
I checked all over to see if I could find a cap that let go, but could find anything..
I tried tuning up again and heard the same thing...
Looked all over very carefully again and couldn't find anything wrong except one end of a rectifier cap (33uf 160volt) was not soldered properly and was loose.

I'm puzzled as to the bang sound ☐

...I should add that after the "bang" I cannot peak the drive. The needle stays at the bottom (zero) :/

Thank you for any help
Joe

56600. couple of items for sale

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-28 10:49:11 UTC
From: n4jhy@...
Topic: 56600 Message: 56600

Hi you all. Have a couple of items for sale for Kenwood Hybrid radios-

1- VFO unit for the TS-820/TS-820s. Tested and working. Want $45 shipped.

2- Original service manual for TS-520s in nice condition.

Please contact me off group if interested.

I have pictures to send you.

email n4jhy@yahoo.com

Thank you,

Bruce N4JHY

56601. Re: [TS-520_820_530_830] Low volume

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-28 08:01:49 UTC
From: Joe
Topic: 56591 Message: 56601

Thanks Joe, I will check those resistors for sure!

Sent from my iPad

56602. Re: [TS-520_820_530_830] Low volume

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-28 12:31:57 UTC
From: George Bower
Topic: 56591 Message: 56602

Check to see if af control has been turned. I did the same thing.

73
Georgewd4hbc

Pray for the United States and our new President

On Feb 27, 2017, at 1:21 PM, John Davidson k8jd@... [TS-520_820_530_830] <TS-520_820_530_830@yahoogroups.com> wrote:

Is it also low with headphones or an external speaker plugged in ?

My radio is Ham Radio...CW is Real Radio 73, John...K8JD

From: "Joe outwestcw@... [TS-520_820_530_830]" <TS-520_820_530_830@yahoogroups.com>
To: TS-520_820_530_830@yahoogroups.com
Sent: Sunday, February 26, 2017 3:45 PM
Subject: [TS-520_820_530_830] Low volume

Hello, my name is Joe Ve7lsb
I have a ts-530 with low volume. I wonder if anyone would have any ideas what to look for? Volume turned up full is at about 10-15 percent of normal

Thank you
Joe

56603. TS-830s Drive control shaft ?

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-28 18:59:33 UTC
From: bobcolenso@...
Topic: 56603 Message: 56603

So I'm finishing up refurbing an '830s. So far I have; replaced all 100+ electrolytics, rebuilt the band switches,
cleaned and lubed all pots and switches, cleaned and lubed the VFO, replaced / buzz-cleaned relays, all that kind of stuff.

Now I'm putting it back together. HOUSTON, WE HAVE A PROBLEM!!! The short-stubby shaft for the Drive control won't line up with the shaft for the variable caps, about half a hole off. It almost kinda-sorta looks like the board bowed somehow.

So, if, while doing the bandswitches, one or more was not seated properly on the RF board (say up just a tad), would that through off the alignment for the Drive control shaft?

Or what other possibilities are there?

Lunch break is over. Got to go.

Thanks,
Bob - KD8WU

56604. Re: [TS-520_820_530_830] TS-830s Drive control shaft ?

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-02-28 22:00:03 UTC
From: fpath fpath
Topic: 56603 Message: 56604

Bob,
Are you talking about drive control shaft or band switch shaft?

The drive shaft for air caps on RF board: check to see if the mounting brass spacer is place, if missing and you screw mounting screw in, this will cause mis alignment. Seen it a couple of times

73s
Dave
Vk5 pdl
Sent from my HTC

"bobcolenso@... [TS-520_820_530_830]" <TS-520_820_530_830@yahoogroups.com> wrote:

So I'm finishing up refurbing an '830s. So far I have; replaced all 100+ electrolytics, rebuilt the band switches,

cleaned and lubed all pots and switches, cleaned and lubed the VFO, replaced / buzz-cleaned relays, all that kind of stuff.

Now I'm putting it back together. HOUSTON, WE HAVE A PROBLEM!!! The short-stubby shaft for the Drive control won't line up with the shaft for the variable caps, about half a hole off. It almost kinda-sorta looks like the board bowed somehow.

So, if, while doing the bandswitches, one or more was not seated properly on the RF board (say up just a tad), would that through off the alignment for the Drive control shaft?

Or what other possibilities are there?

Lunch break is over. Got to go.

Thanks,

Bob - KD8WU

56605. File - Message on approved membership.txt

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-01 03:26:32 UTC
From: TS-520_820_530_830@yahoogroups.com
Topic: 54481 Message: 56605

Welcome to the Yahoo Kenwood TS-520_820_530_830 Amateur Radio Group. This group is comprised of members who's interest is in maintaining and operating the Kenwood TS-520, TS-820, TS-530, TS-830, TS-510, TS-511, T-599/R599 and R820 Hybrid transceivers, transmitter and receivers. In addition, the group supports discussions covering the associated Kenwood accessories such as the VFO-520, VFO-820, VFO-230, and VFO-240 remote VFOs, the Kenwood antenna tuners, and the various Kenwood desk and hand microphones.

This is a restricted group requiring membership approval prior to receiving and posting messages to the group. To join the group simply complete the Yahoo Kenwood TS-520_820_530_830 Group's application process by clicking on the “+ Join Group” icon on the group's homepage. Select the desired method of receiving messages by clicking the appropriate radio button, then provide a brief description about yourself to include: your first name, your Amateur Radio call sign, your interest in the Kenwood hybrid radio, and the model of Kenwood hybrid you own, operate, or in the process of purchasing in the text box provided. If you are not a licensed Amateur Radio operator, no problem, simply complete the application process and provide the same information less the Amateur Radio call sign. Once you have completed the text, click the Join Group icon. Your application will be reviewed and approved by a group co-owner or Moderator. If you leave the application text box blank, your application for membership will be rejected. Simply reapply and provide the information requested and resubmit your application for membership.

New members are placed on a "Moderate" status. This means that any message a new member posts to the group must be approved by a group co-owner or Moderator before it appears on the group server for all members to see. The length of time a new member remains in a "Moderate message status" is determined by the members ability to adhere to, and follow the group's policies. The faster the new member(s) can prove they are adhering to, and following the group's policies, the quicker the new member's status will be changed to “Allowed”.

The “Allowed” status means the member can submit/post their messages without group co-owner or Moderator's approval. A member who's message status is set to “Allowed” may have their message status changed to "Moderate" if it is deemed necessary by a group co-owner or Moderator for one of the following reasons:

1. Failure to follow the group's policies after being informed by a group co-owner or Moderator
2. Knowingly violate any of the group's policies
3. Any improper behavior by the member that is deemed inappropriate by a group co-owner or Moderator

The group is moderated by both group co-owners and group Moderators. While we would like to have a group co-owner and/or Moderator present 24/7, that is not possible, as group co-owners and Moderators have a life too. Therefore, there will be times when a group co-owner and/or a moderator will not be present. This will affect the time a moderated member's messages may take to get approved/rejected. This occurs most often during major holidays Also, the group's server is not maintained by the group co-owner(s) or Moderators.

Therefore, when Yahoo has problems affecting Yahoo Groups, ALL members will simply have to wait for Yahoo to fix the problem. Group co-owners and Moderators also do not have any control over how the group's server handles attachments to messages or how message search results are provided.

Page 1

As stated above, this group has a set of policies that all members must agree to and abide by. If any member, new or old, that feels they cannot accept the group's policies, that member is free to terminate their membership at any time without notifying the group co-owners and/or Moderators.

Group's Policies:

1. Profanity of any type, regardless of the word and/or phrase(s) used in a message, is not allowed. This includes the use of abbreviation to improper words, use of symbols to substitute for letters, etc. In short, the use of profanity is NOT ALLOWED, PERIOD!!! The quickest way to get banned from this group is to use profanity!!!

2. Disrespect/Flaming any member regardless of the reason, is not allowed.

3. Taking over a thread by a member that changes the threads original subject and content, is not allowed.

4. Messages that contain as part of the message text, discussions of a member's private life are not allowed. Responses to messages are to pertain to the original message subject.

5. Long discussions that are products of an original messages are not allowed. If there are 2 or 3 members who wish to discuss a subject in more detail and at great lengths should take their discussions off the group and continue their discussions using private email addresses.

6. MESSAGES THAT DO NOT CONTAIN ACCEPTABLE MESSAGE SIGNATURES, WILL BE SUMMARILY REJECTED! It takes less than 5 seconds to ensure your message contains an acceptable message signature. There is no excuse for not adding a message signature to your messages. Political or religious signatures/statements are not permitted.

The following are examples of the ONLY acceptable message signatures:

Licensed Amateur Radio members:

Example:
“73s
John WA1ABC”

Non-licensed members

Example:

73s
Mary

If a member does not wish to include their Amateur Radio call sign in their signature, then simply use their first/given/Christian name ONLY, same as non-licensed members.

Each message signature must be positioned at the bottom of the message text and separated by at least one line.

For example:

Hi John,

Yes capacitor C25 is the right cap you should be checking. For details, review the schematic.

73s
Bill

Screen names such as JLH524 or MWPO125 are not acceptable message signatures. Screen names are acceptable ONLY when used as part of the member's email address.

The member's email address is not an acceptable message signature, regardless whether the member's name appears in the email address or not.

A member's “initials” are not acceptable as a messages signature.

A member may add up to 2 additional lines to their message signature. The additional 2 lines may contain a link to the member's website and a link to the member's Amateur Radio club etc. The addition of 3 or more lines to the message signature, listing the many different clubs the member belongs to, the positions they hold within the respective club(s), their professional position within the company the member works for, and other information is considered excessive and not allowed. The following is an example of an acceptable message signature containing two additional line:

73
Mike-w5rkl
www.w5rkl.com
Yahoo Kenwood TS-520_820_530_830 Moderator (Mike-w5rkl is no longer a Moderator, but used as an example--tnx)

In the past there have been members who state our group policies are too strict. We maintain strict group policies for 2 simple reasons:

1. To maintain good order and discipline in the group.
2. Provide a friendly group where all members are treated equally and an environment free of improper behavior

73
Yahoo Kenwood TS-520_820_530_830 Hybrid Group Co-owners and Moderators.

56606. File - Rules, For Sale or Want to buy Posts

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-01 03:26:32 UTC
From: TS-520_820_530_830@yahoogroups.com
Topic: 54620 Message: 56606

Rules pertaining to Occasional For Sale and Want to Buy Posts.

Members of the TS-520_820_530_830 Yahoo Group who have been members for at least 30 days may place " for sale" posts no more frequently than two in any 30 day period." Want to buy" posts are permitted immediately upon membership and are limited to 2 in any 30 day period.

For sale posts are limited to the sale of TS-510, 515, 520, 820, 530, 830, and the 599 series twins, as well as Kenwood accessories intended for use with these radios.
Also, group members may post "service equipment" for sale. This may include, but are not limited to: vtvms, various signal generators, and other testing/service equipment. Posts must include: the make and model of the item for sale, as well as an accurate description of its condition, and the asking price.

When the item is sold, please make a short post to that effect.

Replies and discussions regarding these posts must be taken off of this group either by direct e-mail to the seller or as directed by the seller.

Buyers and sellers are on their own. The TS-520_820_530_830 Yahoo Group, its owners, co-owners, moderators, or members other than the seller, hold no responsibility for the accuracy of the posts or the credibility of the seller or buyer.

We do not expect that members of this group will misrepresent, or in any way cheat other members. At the co-owners(s)/moderators discretion, we may choose to ban any member from making further for sale posts, or ban the member from this group entirely if we believe their posts or transactions are not of the utmost integrity.

We ask that those who buy and sell equipment as a main business not post here. We will allow posts from members who occasionally restore and sell equipment/accessories as stated above.

We expect our members to use discretion. If excessive traffic develops as a direct result of these postings, they may have to be discontinued.

Walter Breining, N9WB
Joseph T Stiles, WB7UQU

56607. Re: No Bias Voltage Reading 520S

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-01 02:23:21 UTC
From: brian.e.mee@...
Topic: 56572 Message: 56607

OK. I just rechecked with the same results. No bias current on any band with CAR centered or at any other position. Looks like I will open it up and check on Terry's suggestions. Will probably be a few days to get to it. I will report results.

Maybe I blew the screen resistors-but no noises or smoke noticed.

Brian
KM4TAP

56608. Re: No Bias Voltage Reading 520S

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-01 14:48:43 UTC
From: wagstw46@...
Topic: 56572 Message: 56608

Brian:

I think you need to read your Operating Manual on how to set the idle or resting plate current. The CAR Level pot has nothing to do with setting it. It is not set in Tune or CW modes.

Read Section 4.11 Transmitter Tuning.

The first thing you are directed to do is to pre-set the controls. See Table 2.

Have to ask yourself what it is you are doing and why you are doing it and what is the proper procedure for doing it.

Go to my Website and look under FAQs and read "What is correct resting plate current".

Setting resting plate current is about setting the final tubes on the linear portion of the Final tubes operating curve. You are setting the quiescent point or the Q point. From this Q-point in SSB mode under modulation the plate current will swing either side up and down the transfer curve without being clipped or distorted.

You always set resting plate current in SSB mode (LSB or USB). You do this with the Mic gain pot turned all the way down or CCW. You do that to make sure there is nothing coming down the Mic chain (audio or noise) that would result in output from the Balanced Modulator that would result in RF Drive being applied to the Final tube control grids. No way to set the resting or idle plate current if there is RF drive voltage being applied to the Final tubes. This is why I much prefer to call it adjusting the Zero Signal Plate current.

Absolutely no reason to be messing with the CAR Level pot to set resting or idle current.

When troubleshooting the inability to set resting plate current no need to involve the CAR Level pot.

I gave you the basic elements for plate current which included:
1. Good tube with cathode emission.
2. Heaters turned on and no open filaments.
3. Cut off bias switches to operating bias at tube socket lug
4. Spec screen grid voltage
5. Spec plate voltage (at the tubes anodes and not just on the HV position of the panel meter.
6. Good metering circuit including cathode resistors, meter multiplier resistor, meter switch contacts, and good meter movement.

A matter of minutes to carefully check these items. Do not allow accidental hand contact or meter leads to swing into the 900vdc.

I believe I also told you one of most common problems is bad contacts in RL-1 aux control relay and how to troubleshoot that with temporary grounding of RLK. Only do this if measuring of bias voltage on control grids confirms that cut off bias is not switching to

operating bias.

Terry K9TW

56609. Re: No Bias Voltage Reading 520S

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-01 15:53:35 UTC
From: wagstw46@...
Topic: 56572 Message: 56609

I forgot to mention the that bandswitch has nothing to do with setting the zero signal plate current to 60ma. You can cut the bandswitch out and throw it over your shoulder and the Final tubes will still be able to produce plate current. They dont know what band you are setting zero signal plate current on.

I know many folks dont like to hear "RTFM", but it is a must.

In addition to reading the Owners Operating Manual if you have the interest and want to take the time to understand how a vacuum tube works there are numerous good books on the subject and several mentioned here in the past. If you understand how a vacuum tube works then you can study the KW Hybrid schematics to see how KW turns the tube on and how zero signal plate current is established.

Some good primers include a 1960s to 1970s ARRL Handbook or the abbreviated version ARRL Understanding Amateur Radio. Both of these have sections on basic vacuum tubes. Also, John T. Fryes Basic Radio course is good. Once you understand how a triode works then you can look at KW schematic and see how all the necessary conditions are provided. If books arent your thing then Google is your friend.

We can give you some common things to look for including operator error items like having the heaters turned on or the screen grid switch turned on. No shame in this as we have all had our senior moments. We can also give you common failures like dirty relay contacts, blown cathode resistors, open filaments. We can direct you to take certain measurements like cutoff and operating bias.

However, when people start telling you to check it on other bands, to clean bandswitch contacts, to open the CAR level pot more etc their hearts are in the right place and they want to help, but clearly they lack some basic electronic fundamentals and KW hybrid specific knowledge and experience. Challenge for you is to sort the good from the bad advice and lacking fundamental knowledge can make that near impossible.

So as members correcting these folks in a civil way is necessary. Sitting silent on the sidelines while someone goes off to act on bum dope isnt fair. Of course today we live in a pc world where far too many people get their feelings hurt far too easily. Not my intent to do that.

Terry K9TW

56610. TS-511s Stuff Needed

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-01 21:24:14 UTC
From: jstoneback@...
Topic: 56610 Message: 56610

I just got a nice TS-511s in the mail, today. And it needs a new VFO knob - the shiny insert at least, also one of the smaller mode switch knobs.

Most of all, it needs a PS-511 power supply.

Anyone having surplus stuff for this rig, please let me know.

73,

Jim K4AXF
TS-520
TS-530SP
R-5000

56611. Re: TS-830s Drive control shaft ?

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-01 18:56:39 UTC
From: bobcolenso@...
Topic: 56603 Message: 56611

Thanks Dave. I am talking about the Drive control shaft, and yes that brass spacer IS in there.

Haven't had a chance yet, but I'll try just taking all apart and putting it back together. Doesn't make a lot sense in THIS situation, but you never know.

Bob - KD8WU

56612. Re: TS-511s Stuff Needed

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-02 00:26:44 UTC
From: Charles Rodecap
Topic: 56610 Message: 56612

Jim
I have an entire 511S and power supply if you are interested. Knobs look original.

Condition outside looks decent, no major scratches or dents.   interior ??? was stored in a garage so does not look wonderful.
I have never plugged this in so no idea if it works or not, I did blow out the leaves, chaff and dust once but that is all I have done.
Call to discuss if you are interested.   260 / 615 - 9690
CharlieKA9HDGN. E. Indiana

56613. TS-830s and questions about L41

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-02 00:58:42 UTC
From: wayne.bowyer@...
Topic: 56613 Message: 56613

I'm in need of a coil for my 830s. L41 is missing. I've been given an old TS-120s for parts....have not yet started scrounging it for parts but will shortly. I've read the files related to L41 in this boards "files" tab. If I can find a blank or appropriate coil form all is good. Not at all afraid of rewinding a coil form if I have the right form. But not having the original L41 coil I'm not sure of which one in the 120 to look at. I've also seen some writings of winding a coil on a toroid but again I don't know which toroid core to use. Could anyone shed some light on my questions? I started with this project some weeks ago and asked a few questions here. I sent a couple emails out following up on leads on parts but haven't gotten a response so thought I'd better ask more questions. I've removed the RF board from my 830 and removed the jumper from beneath the board that someone had installed when they removed L41. So I think I'm ready for the next step. Many thanks!

Wayne
n4eyz

56614. Re: [TS-520_820_530_830] TS-830s and questions about L41

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-02 01:51:03 UTC
From: Walter Dilley
Topic: 56613 Message: 56614

Hello Wayne,

I have a large parts inventory from (used) Kenwood Hybrid radios. L41 is scarce. I'm in the process of engineering a replacement but that won't help you right now. I've pulled an L41 to use as my engineering original but I believe I have one more L41 that I can pull. It should be a working component but won't know until then. If you prefer to stick with one from your 120, I can have a look at the manual to see if any are a candidate.

Let me know what you think.

Walter, kd7dny

On Wed, Mar 1, 2017 at 5:58 PM, wayne.bowyer@... [TS-520_820_530_830] <TS-520_820_530_830@yahoogroups.com> wrote:

>
>
> I'm in need of a coil for my 830s. L41 is missing. I've been given an old
> TS-120s for parts....have not yet started scrounging it for parts but will
> shortly. I've read the files related to L41 in this boards "files" tab. If
> I can find a blank or appropriate coil form all is good. Not at all afraid
> of rewinding a coil form if I have the right form. But not having the
> original L41 coil I'm not sure of which one in the 120 to look at. I've
> also seen some writings of winding a coil on a toroid but again I don't
> know which toroid core to use. Could anyone shed some light on my
> questions? I started with this project some weeks ago and asked a few
> questions here. I sent a couple emails out following up on leads on parts
> but haven't gotten a response so thought I'd better ask more questions.
> I've removed the RF board from my 830 and removed the jumper from beneath
> the board that someone had installed when they removed L41. So I think I'm
> ready for the next step. Many thanks!
>
> Wayne
> n4eyz
>
>
>
>
>
>

56615. Re: VE3PVS Re-Cap Kit

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-02 11:38:20 UTC
From: bobcolenso@...
Topic: 56440 Message: 56615

I've done several of these, it's not that bad of a project but you need to be very meticulous. Note how the caps come out because not all of them are marked, and one is marked WRONG on the circuit board.

C-80 on the PLL board is marked wrong on the pcb. And the polarity marking on the schematic supports the pcb marking AND THEY ARE BOTH WRONG!!! Digging deeper into the schematic you'll see the MINUS voltages on the caps POSITIVE lead. My posting on QRZ....
https://forums.qrz.com/index.php?threads/ts-830s-capacitor-polarity.462406/
https://forums.qrz.com/index.php?threads/ts-830s-capacitor-polarity.462406/

Also, on the AF board, check C-7 (kind of opposite corner from the relay). Some radios have a 4.7uF 50V electrolytic there, others have a 0.01 disc cap there, and both are supported by different schematics. Jim's cap kits have three 4.7's so you'll have enough if C7 IS an electrolytic. Peter's only have two 4.7's, but he will through in another for free if you ask him.

Hope this help,
Bob - KD8WU

56616. New member and 820 Relay Q

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-02 17:12:13 UTC
From: Joe Laffey
Topic: 56616 Message: 56616

Hi,

I am a new member, and a new owner of a TS-820s. I have it running into an AL-80B amplifier, and I had a question about the relay line.

My understanding is that the relay line output to the amp is not triggered until *after* the TX relay on the TS-820s closes, leading to potential hot switching of the relay in the amplifier. I often see a spike in output right when I key down (SSB). Part of this could be the PTT switch in my MC-50 mic. I reduced it by putting some foam under the PTT switch so it would not bottom out and make a noise. I realize that if there is no sound in SSB then there is no signal being transmitted, and no issue. At least this mic seems to make a sound. So even if I pause before I speak I looks like it is still transmitting something on keydown (output meter jumps, sometimes a lot).

My concern is that I am hot switching the relay in the AL-80B with every keydown. I have seen some mods to the TS-820s where you add a transistor to switch the relay line output at the same time the TX relay is triggered inside the 820. This would likely work fine. I was considering instead building a generic device that went between the mic and the 820 which would handle the proper keying order by trigger the amp first, and then the rig, un-keying in the reverse order. This would be easy to do, and the device could be used with any rig that exhibited this issue.

But... before I create a solution to a non-problem...

A) Is it true that the TS-820s has this issue.

B) Does it matter? Am I damaging the relay contacts in the amp?

Thanks.

--
Joe
KE0KZI
St. Louis

56617. Re: [TS-520_820_530_830] TS-830s and questions about L41

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-03 02:20:35 UTC
From: wayne.bowyer@...
Topic: 56613 Message: 56617

Hi Walter
I had earlier sent an inquiry to Jan Servaites and I got a response this morning. He's going to wind a new coil for me. So hopefully all will go well and this problem will get solved. This coil is a bit expensive but it's a rare part too so it's understandable. The rig is not much more than a doorstop without it. Looking forward to getting it going. Thanks again for getting back to me!

Wayne
n4eyz

56618. 12BY7 replacement procedure

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-02 21:14:40 UTC
From: Joe Laffey
Topic: 56618 Message: 56618

Hi,

What is the most efficient way to get at the 12BY7 for replacement? The tube shield is connected to the PCB. I suppose I need to remove the PCB and desolder the ground strap to the shield?

What is the easiest way to remove the PCB? Looks like perhaps removing the coupling shaft for the plate control? Also there is a wire that goes over to the RF unit that will have to be removed and reattached.

Sound right? Am I missing something simple? I didn't have any luck searching for this online.

Thanks

--
73
KE0KZI
Joe

56619. Re: [TS-520_820_530_830] TS-830s and questions about L41

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-03 00:56:32 UTC
From: drew@...
Topic: 56613 Message: 56619

Walter,

Would you have a 36.895 MHz crystal (TS520/R599 28.0 band) you'd care to sell?

73,
Drew K3PA

56620. Crystal needed

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-03 15:29:49 UTC
From: drew@...
Topic: 56620 Message: 56620

Hybrid'ers,

Does anyone have a 36.895 MHz they would care to sell? This is the 28.0 band LO crystal for the TS520 and my R599A.

73,
Drew K3PA

56621. R-599 6 & 2 M converters

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-03 15:30:54 UTC
From: drew@...
Topic: 56621 Message: 56621

Does anyone have either of these that they care to part with?

73,
Drew K3PA

56622. Re: [TS-520_820_530_830] 12BY7 replacement procedure

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-03 21:29:59 UTC
From: Lou Blasco
Topic: 56618 Message: 56622

Hi Joe,

I don't think the shield is "connected" to the PCB in the way you think. I have a few hybrid radios and in all of them the strap slides up the inside of the shield. It can be a pretty tight fit and it might require some persuasion to release the shield. I think this has been discussed way back in time on this forum. If I find something I'll let you know.

Regards

Lou
VK3ALB

At 08:14 03/03/2017, you wrote:
>
>
>Hi,
>
>What is the most efficient way to get at the 12BY7 for replacement?
>The tube shield is connected to the PCB. I suppose I need to remove
>the PCB and desolder the ground strap to the shield?
>
>What is the easiest way to remove the PCB? Looks like perhaps
>removing the coupling shaft for the plate control? Also there is a
>wire that goes over to the RF unit that will have to be removed and reattached.
>
>Sound right? Am I missing something simple? I didn't have any luck
>searching for this online.
>
>Thanks
>
>--
>73
>KE0KZI
>Joe

56623. Re: [TS-520_820_530_830] 12BY7 replacement procedure

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-03 21:47:21 UTC
From: Lou Blasco
Topic: 56618 Message: 56623

Found them,

Try messages 24600, 40101, 53682 and look at all
the replies. Bottom line, try and spread the
shield open a little to release it's grip on the
grounding strap then pull the shield straight up.

Regards

Lou
VK3ALB

At 08:29 04/03/2017, you wrote:
>
>
>Hi Joe,
>
>I don't think the shield is "connected" to the PCB in the way you
>think. I have a few hybrid radios and in all of them the strap slides
>up the inside of the shield. It can be a pretty tight fit and it
>might require some persuasion to release the shield. I think this has
>been discussed way back in time on this forum. If I find something
>I'll let you know.
>
>Regards
>
>Lou
>VK3ALB
>
>At 08:14 03/03/2017, you wrote:
> >
> >
> >Hi,
> >
> >What is the most efficient way to get at the 12BY7 for replacement?
> >The tube shield is connected to the PCB. I suppose I need to remove
> >the PCB and desolder the ground strap to the shield?
> >
> >What is the easiest way to remove the PCB? Looks like perhaps
> >removing the coupling shaft for the plate control? Also there is a
> >wire that goes over to the RF unit that will
> have to be removed and reattached.
> >
> >Sound right? Am I missing something simple? I didn't have any luck
> >searching for this online.
> >

> >Thanks
> >
> >--
> >73
> >KE0KZI
> >Joe
>
>

56624. Re: [TS-520_820_530_830] 12BY7 replacement procedure

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-03 22:45:21 UTC
From: David Boothe
Topic: 56618 Message: 56624

Lou,
Agree with you. I have worked on several (530, 820, 830) and the tube shields were snug but were not attached to the board
Dave K3DWB

Sent from my iPhone

> On Mar 3, 2017, at 2:29 PM, Lou Blasco radio@....au [TS-520_820_530_830] <TS-520_820_530_830@yahoogroups.com> wrote:
>
> Hi Joe,
>
> I don't think the shield is "connected" to the PCB in the way you
> think. I have a few hybrid radios and in all of them the strap slides
> up the inside of the shield. It can be a pretty tight fit and it
> might require some persuasion to release the shield. I think this has
> been discussed way back in time on this forum. If I find something
> I'll let you know.
>
> Regards
>
> Lou
> VK3ALB
>
> At 08:14 03/03/2017, you wrote:
> >
> >
> >Hi,
> >
> >What is the most efficient way to get at the 12BY7 for replacement?
> >The tube shield is connected to the PCB. I suppose I need to remove
> >the PCB and desolder the ground strap to the shield?
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> >What is the easiest way to remove the PCB? Looks like perhaps
> >removing the coupling shaft for the plate control? Also there is a
> >wire that goes over to the RF unit that will have to be removed and reattached.
> >
> >Sound right? Am I missing something simple? I didn't have any luck
> >searching for this online.
> >
> >Thanks
> >
> >--
> >73
> >KE0KZI

> >Joe
>
>

56625. Re: [TS-520_820_530_830] Crystal needed

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-03 23:46:11 UTC
From: Walter Dilley
Topic: 56620 Message: 56625

Hi Drew,

Yes, I missed your previous email. I will contact you off list. Thanks.

Walter, kd7dny

On Fri, Mar 3, 2017 at 8:29 AM, drew@whisperingwoods.org
[TS-520_820_530_830] <TS-520_820_530_830@yahoogroups.com> wrote:

>
>
> Hybrid'ers,
>
>
> Does anyone have a 36.895 MHz they would care to sell? This is the 28.0
> band LO crystal for the TS520 and my R599A.
>
>
> 73,
>
> Drew K3PA
>
>
>
>
>
>
>

56626. Re: 12BY7 replacement procedure

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-04 02:59:08 UTC
From: Wayne Bowyer
Topic: 56618 Message: 56626

The shield is not connected (soldered) to the tab or whatever it's called that comes up from the pcb. (or at least on mine it's not). On mine I simply gently pulled up and it and tube came out/off. Then just pushed tube out of the shield. My old HW-101 is made the same way. It just seems to be a friction type fit. Hope this helps.

Wayne
n4eyz

56627. Re: [TS-520_820_530_830] 12BY7 replacement procedure

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-03 22:15:13 UTC
From: Joe Laffey
Topic: 56618 Message: 56627

That worked great. It was indeed just a really tight tube shield.

Thank you.

--
73
Joe
KE0KZI

> On Mar 3, 2017, at 3:47 PM, Lou Blasco radio@ozemail.com.au [TS-520_820_530_830] <TS-520_820_530_830@yahoogroups.com> wrote:

>
> Found them,
>
> Try messages 24600, 40101, 53682 and look at all the replies. Bottom line, try and spread the shield open a little to release it's grip on the grounding strap then pull the shield straight up.
>
> Regards
>
> Lou
> VK3ALB
>
>
>
>
> At 08:29 04/03/2017, you wrote:
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>> Hi Joe,
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>> I don't think the shield is "connected" to the PCB in the way you
>> think. I have a few hybrid radios and in all of them the strap slides
>> up the inside of the shield. It can be a pretty tight fit and it
>> might require some persuasion to release the shield. I think this has
>> been discussed way back in time on this forum. If I find something

>> I'll let you know.
>>
>> Regards
>>
>> Lou
>> VK3ALB
>>
>> At 08:14 03/03/2017, you wrote:

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>> >Hi,
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>> >The tube shield is connected to the PCB. I suppose I need to remove
>> >the PCB and desolder the ground strap to the shield?
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>> >What is the easiest way to remove the PCB? Looks like perhaps
>> >removing the coupling shaft for the plate control? Also there is a
>> >wire that goes over to the RF unit that will have to be removed and reattached.
>> >
>> >Sound right? Am I missing something simple? I didn't have any luck
>> >searching for this online.
>> >
>> >Thanks

>> >
>> >--
>> >73
>> >KE0KZI
>> >Joe
>>
>
>

56628. Digital Display for TS-520 (S)

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-04 19:29:15 UTC
From: k3jls@...
Topic: 56628 Message: 56628

Hello folks.

As you may know, Neil - the owner of AADE - passed away recently. He was a very clever and talented fellow who developed - among other things - a digital display for many radios, including the TS-520 series.

When I was unable to get one for my Heathkit radios, I set about developing a similar device, which is better described on my website (check out the top link).

http://k3jls.net/ http://k3jls.net/

Since I have a couple of assembled and tested units left over, I was wondering if there might be any interest within this community. Of course, I'll have to purchase a radio just to be sure that the software works properly. From what I've read, the TS-520S has the buffered HFO, BFO and VFO signals readily available on the rear of the radio.

If you have the time, please take a look at the website. I would expect to make bare bones boards and a pre-programmed PIC available for about $26 (shipped). The assembled units (no case) will be available for $70 (shipped).

Again, I'll have to get my hans on a radio to verify that the code works properly.

Please message me DIRECTLY.

73's - Joe - K3JLS

56629. TS-530S foot bolts

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-04 21:09:45 UTC
From: louiswilen@...
Topic: 56629 Message: 56629

Just posting this so that it's available in the archives. I didn't find this info anywhere. The Kenwood service manual has only the Kenwood part number.

If you need bolts for the feet on a TS-530S, the correct size is M4-0.7 x 8mm. These are Pan Head Machine Screws. (Probably the same size on a TS-830S.)

These are available at Home Depot on the rack in in the drawers under UPC code 887480027389.

If you're doubling-up the feet to put the rig at an upward angle, the bolts will need to be longer, but I don't know the exact length. It will be M4-0.7 x (some number longer than 8mm).

Louis
W3VVV

56630. TS520S CAR unit repair

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-05 00:59:07 UTC
From: Lou Blasco
Topic: 56629 Message: 56630

Hi All,

There has been several discussions on this list regarding the 2SC460 transistor in the CAR UNIT (X50-0009-01) that is used in the TS520/520S.

I pulled my 520S out of storage last week and found it dead as a dodo. No TX, no RX.

It was easy to check HET, VFO and CAR signals on the back of the rig and find there was no CAR in any mode. I recalled that the LSB crystal was slow to start on cold days but now all crystals were dead.

A quick twiddle on T1 brought the CAR back but it was very unstable and the levels would change depending on which mode I selected. Switching to TUN would kill the CAR signal.

Ground connections were good, BS was good and control voltages for each mode were good. No cold solder joints, no broken wires, no broken tracks.

Bias voltages on Q1, Q2 were around 0.9V and touching the anodes of D1 to D4 with a meter probe would sometimes start the crystals oscillating.

I figured I would start with Q1. The NTE equivalent is NTE85 and there are a number of eBay sellers listing 2SC460's but I couldn't wait for shipping so I searched though my go to ICOM chassis (They are good for something) and pulled a 2SC945 off the main board. The 2SC945 is not the same spec as the 2SC460 but previously I had used a 2SC945 to replace the 10MHz doubler transistor in a TS120 so I knew it would be ok at 3.9MHz.

The rig burst into life and the instability I had seen previously had gone, no varying RF level depending on mode and T1 adjustment was now smooth and repeatable. Bias voltages were back in spec too. Since I had the rig open I thought I would see what else might work so I tried a 2N2222A in place of the 2SC945 and that worked just as well.

I'd be happy to try a 2N2222 or 2SC945 if I came across the same problem again.

Regards

Lou
VK3ALB

Interesting note for this board, the screen print overlay shows D1 to D4 installed the wrong way about. Cathodes must go to ground!

56631. Alternate SSB filters

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-04 08:41:07 UTC
From: Joe Laffey
Topic: 56631 Message: 56631

Hi,

I have a TS-820s.

I have seen some mods to allow you to switch between the CW filter and the SSB filter when in CW mode. Has anyone ever made a mode to choose between two different widths of SSB filters in SSB mode? Say the default 2.4KHz and a 3.0KHz, or a narrow filter, say 1.8KHz.

I guess you would use the DH button or something to do the switch.

A lot of modern rigs have an adjustable filter, which is a nice feature.

Thoughts? Thanks.

--
73
Joe
KE0KZI
St. Louis, MO

56632. TS-830 meter ip and R10

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-05 18:57:09 UTC
From: jbaydcoid@...
Topic: 56632 Message: 56632

I have an 830 here that had blown the cathode metering Rs and after replacing them and adding the recommended diode string protection did some noodling with the ip metering circuit. Read the (many) fine explanations on K9TW website, K9TW.com, most pertinent to this is: "TS-830 Why R10?". My question is if we started from scratch is there an improvement possible?

As I understand R10 is mostly to protect the meter from a transient in the event that after a cathode R blowout the meter is switched from something to the Ip position. Terry indicates the cathode voltage without R10 would float towards anode (900V) but that grounded by R10 it hangs about 120V. With 120V at the top of R6 there is still about 25V on the meter (with or without R10). Still way above the 400mV full scale. (I measure the meter as 800ohm, 500uA, 2000ohm/v, .4V full scale. Mine actually is 791ohm) With the diode string in place the meter shouldn't ever see more than about 480mV (2.1V at the cathode). A LOT less than R10 provided. By my calculations R10 if 6.8k introduces about 8% error. Not a lot and given there small size, intended usage etc its not the end of the world. Still, taking everything into account once the diode string is installed is there still a requirement for R10?

What about replacing R10 with a single 1N4007 which is across the meter in the traditional protective circuit? Presuming that passes muster would the cathode R diode string still be desirable? Or would it be better to let the cathode Rs blow and 'protect' other hard to repair stuff?

Appreciate any help understanding the factors that need to be considered.

John
W0MPM

56633. R599A Removing Osc Board

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-04 18:39:23 UTC
From: drew@...
Topic: 56633 Message: 56633

Kenwood Folks,

Has anyone here ever removed an LO Osc board from a R599A? I have a bad 28.0 band xtal and need to remove one of the boards for replacement. These are the boards the bandswitch runs through.

It appears that you have to remove the bandswitch shaft. Is these anything else holding them in? Can the board be slid out a bit without removing all wires?

This looks a little tricky and my eyes are not what they once were. Any tips welcome.

73,
Drew K3PA

56634. Radio blows fuse on power up.

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-07 03:55:07 UTC
From: warlord701@...
Topic: 56634 Message: 56634

Hi. I recently purchased a TS-180S on E-Bay. Stated to be a "no worries plug and play radio".
After I hooked it up I left in on RX for about an hour to check for drift. The radio shut itself off, blown fuse. I replaced the fuse with the proper fuse and turned it on. Heard a hum and another blown fuse. Any ideas where I should look? Thanks Bob Wymer, KA6HGT

56635. WTB 520s or 820s

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-07 14:35:05 UTC
From: cwebs@...
Topic: 56635 Message: 56635

Hi guys, new member on this site. I am looking to buy a TS-520s or a TS-820s. If you have one please let me know all about it and what it might need. Pictures would be helpful. Thanks and 73s.

Carl Webster

AB1ZI

56636. RE: [TS-520_820_530_830] WTB 520s or 820s

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-07 15:50:24 UTC
From: David Boothe
Topic: 56635 Message: 56636

Carl,

I have an 820S. You can contact me off list if you like-I'm good on QRZ.com.

Dave K3DWB

-----Original Message-----
From: TS-520_820_530_830@yahoogroups.com
[mailto:TS-520_820_530_830@yahoogroups.com]
Sent: Tuesday, March 07, 2017 9:35 AM
To: TS-520_820_530_830@yahoogroups.com
Subject: [TS-520_820_530_830] WTB 520s or 820s

Hi guys, new member on this site. I am looking to buy a TS-520s or a TS-820s. If you have one please let me know all about it and what it might need. Pictures would be helpful. Thanks and 73s.

Carl Webster

AB1ZI

56637. Re: [TS-520_820_530_830] Radio blows fuse on power up.

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-07 15:55:52 UTC
From: Louis Wilen
Topic: 56634 Message: 56637

Since the seller stated that this is a "no worries plug and play radio"
but you received a defective radio, I think that you should look to the
seller for a solution. Reasonable solutions might be a refund and
return of the radio at the seller's expense or a significant refund of a
portion of the sales price with you keeping the radio.

Ebay normally backs up the buyer when their is a dispute.

Louis W3VVV

On 3/6/2017 10:55 PM, warlord701@... [TS-520_820_530_830] wrote:
>
> Hi. I recently purchased a TS-180S on E-Bay. Stated to be a "no
> worries plug and play radio".
>
> After I hooked it up I left in on RX for about an hour to check for
> drift. The radio shut itself off, blown fuse. I replaced the fuse with
> the proper fuse and turned it on. Heard a hum and another blown fuse.
> Any ideas where I should look? Thanks Bob Wymer, KA6HGT
>
>
>
>

56638. RE: [TS-520_820_530_830] WTB 520s or 820s

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-07 17:28:17 UTC
From: Dick Merryman
Topic: 56635 Message: 56638

Hi Carl,

I have a TS-520S in good condition that works FB. Included with it would be a matching external VFO, digital display, speaker and microphone. Tell me what you think it is worth and if I like it I'll take pictures for you to review.

73,

-Dick-
N3XRU

From: TS-520_820_530_830@yahoogroups.com [mailto:TS-520_820_530_830@yahoogroups.com]
Sent: Tuesday, March 7, 2017 06:35
To: TS-520_820_530_830@yahoogroups.com
Subject: [TS-520_820_530_830] WTB 520s or 820s

Hi guys, new member on this site. I am looking to buy a TS-520s or a TS-820s. If you have one please let me know all about it and what it might need. Pictures would be helpful. Thanks and 73s.

Carl Webster

AB1ZI

56639. Re: [TS-520_820_530_830] WTB 520s or 820s

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-07 16:48:53 UTC
From: Lou Everett, Sr.
Topic: 56635 Message: 56639

I have a real nice TS-820S. If you are interested in purchasing it, let me know and I will provide pics and pricing, to you personal e-mail.

Lou Everett, Sr., WA5LOU

ARRL Official Observer Coordinator, Indiana Section

On Tue, Mar 7, 2017 at 9:35 AM, cwebs@comcast.net mailto:cwebs@comcast.net [TS-520_820_530_830] <TS-520_820_530_830@yahoogroups.com mailto:TS-520_820_530_830@yahoogroups.com> wrote:
Hi guys, new member on this site. I am looking to buy a TS-520s or a TS-820s. If you have one please let me know all about it and what it might need. Pictures would be helpful. Thanks and 73s.

Carl Webster

AB1ZI

56640. Re: [TS-520_820_530_830] WTB 520s or 820s

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-07 18:36:34 UTC
From: Carl
Topic: 56635 Message: 56640

Very interested Lou. Email is cwebs@... Thanks Carl
----- Original Message -----
From: 'Lou Everett, Sr.' loueverettsr@... [TS-520_820_530_830]
To: TS-520_820_530_830@yahoogroups.com
Sent: Tuesday, March 07, 2017 11:48 AM
Subject: Re: [TS-520_820_530_830] WTB 520s or 820s

I have a real nice TS-820S. If you are interested in purchasing it, let me know and I will provide pics and pricing, to you personal e-mail.

Lou Everett, Sr., WA5LOU

ARRL Official Observer Coordinator, Indiana Section

On Tue, Mar 7, 2017 at 9:35 AM, cwebs@comcast.net [TS-520_820_530_830] <TS-520_820_530_830@yahoogroups.com> wrote:

Hi guys, new member on this site. I am looking to buy a TS-520s or a TS-820s. If you have one please let me know all about it and what it might need. Pictures would be helpful. Thanks and 73s.

Carl Webster

AB1ZI

56641. RE: [TS-520_820_530_830] WTB 520s or 820s

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-07 18:42:48 UTC
From: cwebs@...
Topic: 56635 Message: 56641

Dick, You might be over my budget. But try me at cwebs at comcast dot net

Carl
AB1ZI

56642. Re: [TS-520_820_530_830] WTB 520s or 820s

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-07 18:40:25 UTC
From: cwebs@...
Topic: 56635 Message: 56642

Lou I would like to see the rig. My email is cwebs at comcast dot net Carl

AB1ZI

56643. TS-820s Switches

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-07 18:39:07 UTC
From: Joe Laffey
Topic: 56643 Message: 56643

Does anyone have a good source for the four little black switches on the TS-820s? My VOX switch broke.

Thanks.

--
73
Joe
KE0KZI

56644. Re: TS-820s Switches

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-07 22:55:53 UTC
From: Mark Gilger
Topic: 56643 Message: 56644

Joe,
Look at the btoom of this doc.

http://www.wb4hfn.com/KENWOOD/Articles/Kenwood%20Service%20Parts%2006.pdf

Mark, WB0IQK
http://www.wb4hfn.com/KENWOOD/KenwoodHomePage.htm

56645. Re: Radio blows fuse on power up.

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-08 00:53:57 UTC
From: croberts@...
Topic: 56634 Message: 56645

Even if the seller says "as is", "no guarantee", etc, what have is an issue with the seller lying about something.

Go straight to eBay and PayPal.

Tell them that the purchase not according the posting.

Unless you want to mess around with a fried radio.

Chuck
N2KWO

56646. TS-520 weak ham band receive

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-08 01:38:04 UTC
From: jack harness
Topic: 56646 Message: 56646

Hello, I purchased a TS-520 which arrived today ☐ Receive when JJY/WWV button is on is good and calibration signal is +9. Ham band receive is weak and calibration signal can be heard but doesn't move the meter. Any advice as to where to start to in troubleshooting the weak receive would be greatly appreciated. Like I said, it just arrived today, and I am trying to familiarize myself with the radio.

Jack
N8EYF

56647. Re: TS-520 weak ham band receive

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-08 13:27:30 UTC
From: wagstw46@...
Topic: 56646 Message: 56647

Jack:

It is possible that you have a bad/dirty contact on the JJY/WWV pushbutton switch or a broken off lead wire on the switch.

I am assuming that you do not have an RF sig gen or an antenna to use for test signal injection. If that is the case down load the Service Manual and look at the RF board X-ray view and locate the NAT wire wrap post.

Do the following:
1. Place bandswitch to one of the ham bands like 7mhz.
2. Turn the JJY/WWV pushbutton to OFF position.
3. Turn the Marker on
4. Temporarily jumper from the center pin of the SO-239 ant connector on rear panel to the NAT wire wrap post on the RF board.

If have good strong audio and S meter indication when touching jumper to NAT it tells you that L1 Ant Step-up transformer is good and that Q5 RF amp and Q4 Mixer are good and that diodes D2 and D3 are good and seeing switching bias voltage. If not better repeat on 3.5 or 14 mhz to rule out band specific problem.

If still no good try jumpering to RFG wire wrap post. If better at RFG (but not to spec) then likely have a bad L1. Can fail due to accidental transmit RF, but not common problem.

Report back your findings.

You will need the schematic and service manual to troubleshoot this problem. Study the schematic to understand the two front end signal paths and what turns them on and off. Should see that JJY/WWV switch does two functions. Switches the antenna between JAT and NAT and switches 14vdc between the two front end paths.

Terry K9TW

56648. Re: [TS-520_820_530_830] WTB 520s or 820s

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-08 02:36:14 UTC
From: Lou Everett, Sr.
Topic: 56635 Message: 56648

Pictures, attached. If you are still interested after reviewing the pics, let me know and I will send pricing.

73 and God Bless!

Lou Everett, Sr., WA5LOU

On Tue, Mar 7, 2017 at 1:40 PM, cwebs@... [TS-520_820_530_830] <TS-520_820_530_830@yahoogroups.com> wrote:

>
>
> Lou I would like to see the rig. My email is cwebs at comcast dot
> net Carl
>
> AB1ZI
>
>

[Non-text portions of this message have been removed]

56649. Re: [TS-520_820_530_830] Rig chasis ground

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-08 02:52:57 UTC
From: John Geyer
Topic: 56577 Message: 56649

Replace the two prong cord with a good three pronged cord and connect the green wire to the chasis. Then plug it into a grounded outlet.

John wb6ubk

On Saturday, February 25, 2017 8:27 PM, "Mark Lunday wd4elg@... [TS-520_820_530_830]" <TS-520_820_530_830@...m> wrote:

How are folks these days grounding the chasis of their older 520 radios? This hybrid has a two-prong plug. I seem to remember an electrical bite from the chasis about 40 many years ago when I first got the rig was in a two-prong older house, and I leaned against the rig and some other device that had a different potential. No harm done, just surprised me.

So with newer homes and 3-pring outlets for safety, how should we deal with two-prong plugged gear and still obtain a chasis ground?

I know the answer is NOT to run a length of wire from the electrical ground lug to an outside ground rod. Been there, done that, ended up with a radiating element from that 30 foot wire.

And this ain't no lightning protection either, been down that path also.

Just looking for ideas on how to put a square peg in a round hole and keep it safe.

Mark Lunday, WD4ELG
Greensboro, NC FM06be
wd4elg@...
http://wd4elg.blogspot.com
SKCC #16439 FISTS #17972

56650. PS-511 Wanted

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-08 13:33:03 UTC
From: jstoneback@...
Topic: 56650 Message: 56650

Need a power supply for newly acquired TS-511s.

73, Jim K4AXF

56651. Re: PS-511 Wanted

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-08 16:12:03 UTC
From: Mark Gilger
Topic: 56650 Message: 56651

If you do ebay, there is one running right now that ends this Sunday.

Mark, WB0IQK

56652. Re: [TS-520_820_530_830] WTB 520s or 820s

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-08 16:05:15 UTC
From: Carl
Topic: 56635 Message: 56652

No pictures came in with this email. Also your reluctance to tell me the price makes me nervous. Carl
----- Original Message -----
From: 'Lou Everett, Sr.' loueverettsr@... [TS-520_820_530_830]
To: TS-520_820_530_830@yahoogroups.com
Sent: Tuesday, March 07, 2017 9:36 PM
Subject: Re: [TS-520_820_530_830] WTB 520s or 820s

Pictures, attached. If you are still interested after reviewing the pics,
let me know and I will send pricing.

73 and God Bless!

Lou Everett, Sr., WA5LOU

On Tue, Mar 7, 2017 at 1:40 PM, cwebs@... [TS-520_820_530_830] <
TS-520_820_530_830@yahoogroups.com> wrote:

>
>
> Lou I would like to see the rig. My email is cwebs at comcast dot
> net Carl
>
> AB1ZI
>
>

[Non-text portions of this message have been removed]

56653. Re: [TS-520_820_530_830] WTB 520s or 820s

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-08 16:25:50 UTC
From: Joseph Stiles
Topic: 56635 Message: 56653

My fault that the add got through without stating at least a minimum asking amount.
Pictures are culled as the general rule setting of this group.
PSE take all further communication(s) regarding this topic "off the list."
 73
Joe wb7uqugroup co-owner

On Wednesday, March 8, 2017 8:18 AM, "'Carl' cwebs@... [TS-520_820_530_830]"
<TS-520_820_530_830@yahoogroups.com> wrote:

☐No pictures came in with this email. Also your reluctance to tell me the price makes me nervous. Carl
----- Original Message ----- From: 'Lou Everett, Sr.' loueverettsr@... [TS-520_820_530_830] To:
TS-520_820_530_830@yahoogroups.com Sent: Tuesday, March 07, 2017 9:36 PM Subject: Re:
[TS-520_820_530_830] WTB 520s or 820s
 Pictures, attached. If you are still interested after reviewing the pics,
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73 and God Bless!

Lou Everett, Sr., WA5LOU

On Tue, Mar 7, 2017 at 1:40 PM, cwebs@... [TS-520_820_530_830] <
TS-520_820_530_830@yahoogroups.com> wrote:

>
>
> Lou I would like to see the rig. My email is cwebs at comcast dot
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> AB1ZI
>
>

[Non-text portions of this message have been removed]

56654. Re: [TS-520_820_530_830] Rig chasis ground

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-08 16:50:30 UTC
From: <basketoak@...>
Topic: 56577 Message: 56654

John,

Good to go with the third (green) wire, but....

1. Connect the HOT to....?

2. Connect the NEUTRAL to....?

Dave
KG4MGB

---- "John Geyer wb6ubk@... [TS-520_820_530_830]" <TS-520_820_530_830@yahoogroups.com> wrote:

=============
 Replace the two prong cord with a good three pronged cord and connect the green wire to the chasis. Then plug it into a grounded outlet.

 John wb6ubk

On Saturday, February 25, 2017 8:27 PM, "Mark Lunday wd4elg@... [TS-520_820_530_830]" <TS-520_820_530_830@yahoogroups.com> wrote:

  How are folks these days grounding the chasis of their older 520 radios? This hybrid has a two-prong plug. I seem to remember an electrical bite from the chasis about 40 many years ago when I first got the rig was in a two-prong older house, and I leaned against the rig and some other device that had a different potential. No harm done, just surprised me.

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I know the answer is NOT to run a length of wire from the electrical ground lug to an outside ground rod. Been there, done that, ended up with a radiating element from that 30 foot wire.

And this ain't no lightning protection either, been down that path also.

Just looking for ideas on how to put a square peg in a round hole and keep it safe.

Mark Lunday, WD4ELG
Greensboro, NC FM06be
wd4elg@...
http://wd4elg.blogspot.com
SKCC #16439 FISTS #17972

56655. Re: Radio blows fuse on power up.

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-08 16:57:56 UTC
From: wallydoc@...
Topic: 56634 Message: 56655

If you are going to try to fix it I would start by checking the big capacitors for a short to ground using an ohmmeter. Wally KC9INK

56656. Re: [TS-520_820_530_830] Rig chasis ground

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-08 17:11:00 UTC
From: croberts@...
Topic: 56577 Message: 56656

Please do not do that.

Ground loops. Your radio should have only one ground and that one should be to the ground rod.

Look at other posts. Proper grounding.

I've had it happen many times while working on a radio and I've removed ground to be able to move things. I'll learn some day. Ground it even when working on it.

You have to correct hints: where does the neutral (not ground) and where does the hot get connected.

Chuck
N2KWO

56657. Re: [TS-520_820_530_830] WTB 520s or 820s

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-08 17:47:59 UTC
From: cwebs@...
Topic: 56635 Message: 56657

Joe, it might be part my fault. I can't find out how to email a member. I added my email to my replies and I hope that was OK.

Carl

AB1ZI

Perfectly acceptable AND the preferred method. At the top of the msg..the sending member's email should appear between the < email address here> header and most likely the groups address. If in doubt..do what you did...post a short msg...requesting contact OFF LIST with you contact info.

tnx n 73
Joe wb7uqu
group co-owner

56658. Re: [TS-520_820_530_830] WTB 520s or 820s

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-08 18:29:08 UTC
From: Lou Everett, Sr.
Topic: 56635 Message: 56658

Joe -

Sorry! I thought for sure I sent it to Carl's personal e-mail. My apologies to you, Carl, and the group.

73 and God Bless!

Lou Everett, Sr., WA5LOU

ARRL Official Observer Coordinator, Indiana Section

Telephone: 317-749-9883

On Wed, Mar 8, 2017 at 11:25 AM, Joseph Stiles stilesjoseph@yahoo.com mailto:stilesjoseph@yahoo.com [TS-520_820_530_830] <TS-520_820_530_830@yahoogroups.com mailto:TS-520_820_530_830@yahoogroups.com> wrote:

My fault that the add got through without stating at least a minimum asking amount.

Pictures are culled as the general rule setting of this group.

PSE take all further communication(s) regarding this topic "off the list."

73
Joe wb7uqu
group co-owner

On Wednesday, March 8, 2017 8:18 AM, "'Carl' cwebs@comcast.net mailto:cwebs@comcast.net [TS-520_820_530_830]" <TS-520_820_530_830@ yahoogroups.com mailto:TS-520_820_530_830@yahoogroups.com> wrote:

☐
No pictures came in with this email. Also your reluctance to tell me the price makes me nervous. Carl
----- Original Message -----
From: 'Lou Everett, Sr.' loueverettsr@gmail.com [TS-520_820_530_830]
To: TS-520_820_530_830@ yahoogroups.com mailto:TS-520_820_530_830@yahoogroups.com
Sent: Tuesday, March 07, 2017 9:36 PM
Subject: Re: [TS-520_820_530_830] WTB 520s or 820s

Pictures, attached. If you are still interested after reviewing the pics,
let me know and I will send pricing.

73 and God Bless!

Lou Everett, Sr., WA5LOU

On Tue, Mar 7, 2017 at 1:40 PM, cwebs@comcast.net mailto:cwebs@comcast.net [TS-520_820_530_830] <
TS-520_820_530_830@ yahoogroups.com mailto:TS-520_820_530_830@yahoogroups.com> wrote:

>
>
> Lou I would like to see the rig. My email is cwebs at comcast dot
> net Carl
>
> AB1ZI
>
>

[Non-text portions of this message have been removed]

56659. Re: [TS-520_820_530_830] Rig chasis ground

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-08 19:29:40 UTC
From: drew@...
Topic: 56577 Message: 56659

Chuck (and OP),

This is potentially dangerous advice, and easily misunderstood.

If that (no line cord ground is best) were the case, new equipment would not have three prong plugs. But those plugs are required to meet safety code in most cases, and nearly everything with exposed metal has them. Power grounding to one location is correct, but it should be to the power system ground. Any other ground rod system should reference that as closely as practical. K9YC has some very good articles on this, and following them will give you both a safer and an RF quieter system. And of course, there will almost always be some other grounds remotely relating to antennas, etc.

Following the above in and of itself will not result in ground loops. If a ground loop does occur as evidenced by hum, chassis currents, etc, then other devices connected to chassis ground through coax or control wires need to be examined to make sure they all reference the same power branch, and have no other design errors. In one case in my shack, for example, to reduce SO2R hum I had to seperate the main transceiver and 2M rig 12 V power supplies into two units. Sometimes wall warts (linear ones please!) are better on peripheral devices to achieve isolation. In a simple shack, this is easy. In a Multi multi or SO2R contest station it takes some effort.

As for where to terminate line cord neutral versus hot; if both wires go to a power transformer and are symmetric with respect to bypass caps etc, and nothing is grounded, and both sides of power are switched and fused, then it doesn't matter. If only one side of the power supply is switched or fused, that side must be the hot. If none of this is true, and one side of the line is more intimately coupled to chassis or has higher capacitance to ground (which normally should not be), that side should be the neutral.

If these issues all sound like speaking Greek, and you are not comfortable with the K9YC articles, you may be better off not touching the line cord. But updating it really is the right thing to do; these radios would not meet safety codes now.

73,
Drew K3PA

---In TS-520_820_530_830@yahoogroups.com, <croberts@...> wrote :

Please do not do that.

Ground loops. Your radio should have only one ground and that one should be to the ground rod.

Look at other posts. Proper grounding.

I've had it happen many times while working on a radio and I've removed ground to be able to move things. I'll learn some day. Ground it even when working on it.

You have to correct hints: where does the neutral (not ground) and where does the hot get connected.

Chuck
N2KWO

56660. Re: [TS-520_820_530_830] WTB 520s or 820s

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-08 18:15:56 UTC
From: Lou Everett, Sr.
Topic: 56635 Message: 56660

Boy! Now that I am home, I looked at m e-mail and I see where I did send it through the group. I did not do this intentionally. sorry. And, Car, the senders e-mail address is always below the message with a caption "Posted by:" and then shows the e-mail address.

I will resend it and this time I will get it right. Sorry Joe, Carl, and the group.

73 and God Bless!

Lou Everett, Sr., WA5LOU
ARRL Official Observer Coordinator, Indiana Section

Telephone: 317-749-9883

"

No act of kindness, no matter how small, is ever wasted."

On Wed, Mar 8, 2017 at 12:47 PM, cwebs@... [TS-520_820_530_830] <TS-520_820_530_830@yahoogroups.com> wrote:

>
>
> Joe, it might be part my fault. I can't find out how to email a member. I
> added my email to my replies and I hope that was OK.
>
> Carl
>

> AB1ZI
>
> Perfectly acceptable AND the preferred method. At the top of the msg..the
> sending member's email should appear between the < email address here>
> header and most likely the groups address. If in doubt..do what you
> did...post a short msg...requesting contact OFF LIST with you contact info.
>
> tnx n 73
> Joe wb7uqu
> group co-owner
>
>
>

56661. Re: TS-520 weak ham band receive

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-08 21:44:16 UTC
From: n8eyf@...
Topic: 56646 Message: 56661

Thank you for the advice Terry ☐ I will look for a service manual to download today. Actually, I have a large box taking up space at your place now with an 830 in it in the repair line :-) I came across this 520 online and it was supposed to have strong receive. It does sound good with the WWV button depressed. :-) I will follow your advice and see what I can find out with this 520. Thanks again for the response !

Jack
N8EYF

56662. Re: TS-520 weak ham band receive

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-09 00:48:32 UTC
From: wagstw46@...
Topic: 56646 Message: 56662

Yes I need to keep my nose to the grind stone and not spend time on the forum, but need a break from time to time.

Just finishing unit now and two more ahead of yours. Schedule has slipped due to some problems with parts availability and one unit that was a real mess. I will let you know when I start.

Terry K9TW

56663. Re: TS-520 weak ham band receive

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-09 04:27:30 UTC
From: n8eyf@...
Topic: 56646 Message: 56663

Yes, well I am glad you responded to my post. I have a place to start on troubleshooting this 520 ! I gave a quick shot of DeoxIT in the JJY/WWV button after visually checking for obvious connection problems. Ham band receive is still weak, but I believe WWV is now coming in even stronger, lol. Thanks Terry for your time and suggestions.

Jack
N8EYF

56664. TS-830S low output with 6146B cathode resistors failing

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-09 03:49:20 UTC
From: incorridge@...
Topic: 56664 Message: 56664

Just getting back into ham radio after 30+ years. Never forgot Morse Code, but I can't read it as fast as I did as a kid. Thanks to all to posted here about their issues with low output; I used them today to eliminate some potential causes of this radio's low output.
TS-830S "Gold" acquired recently, seller claimed working fine, but it turns out to provide only about 1W output on 40m and 15m; I didn't check the other bands.
In TUNE mode, Plate control dips the meter in IP mode as expected, Drive peaks the meter in RF mode, so does Load, as expected. Conclusion: I have drive RF from the driver tube. But sometimes, max RF is at a different Plate setting than the setting that dips IP. The meter in RF mode goes about a quarter scale, but the external wattmeter barely moves, indicating about 1 W of RF getting out. I'm not sure what, if anything, this means.
Tuning in CW mode instead of TUNE mode gives similar results except that I can use the Carrier control to affect IP and IP rises pretty quickly.
Screen Grid voltage 126V in TUNE mode, drops to 117 when I flip the SEND switch to run some power. 255V when in CW mode, drops to 242 V when transmitting. Goes to -57V when the SG switch is off. Conclusion: Screen Grid voltage okay.
Summary of other things checked:
Band switch shaft coupler inside and outside the cage is aligned; inside part of band switch is working.
Plate choke is still red and looks new, no sign of heating.
Entire radio is very clean inside and out; no sign of smoke getting out of other components.
All resistors on PA PCB appear to be original colours and intact.
Plate voltage is 900V according to the panel meter.

Per advice found here and elsewhere, I checked the cathode resistors. They're not blown open, but they're not what they used to be! Originally 20 ohm, half-watt, 5% resistors, they're now 23, 35, 39, and 41 ohms!
I calculated that the 23 ohm resistor is dissipating a little less than a half a watt if IP is 200 mA; that should be okay. The others carry less current so should dissipate less.
This means the cathode voltage is about 2.2 V higher than it should be which shouldn't matter. 2.2 V out of hundreds of volts - I don't see how that could make a difference...Oh, but that's how we measure IP! The cathode resistors are the shunt for the current meter!
This means my IP indicates much higher than it actually is, so when I get the new resistors in there, I'll be able to readjust my bias control on the back and raise the Carrier control in CW mode, maybe that will help.
Which raises the question for one of the experts here:
1. What situation would cause the cathode resistors to rise in value but not blow open? Is there something else I should look into before I try to tune this up again or transmit?
And one other question:
2. Is 900 V okay for plate voltage? Should I check this with a real voltmeter on the top of the plate choke (scary)? Since the 6146B is rated for only 650 or 700 Vp, isn't Kenwood pushing it here?
I'm so eager to use this radio! The HT-37 is long gone and the Tempo One isn't doing as well as it used to and I lost the 741-based CW audio filter I made for it so long ago.
Thanks in advance to anyone who chimes in and helps me get back on the air!

Cheers
Halden NR7V

56665. Re: WTB 520s or 820s

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-09 23:42:22 UTC
From: cwebs@...
Topic: 56635 Message: 56665

I have bought an 820s from a fellow member. Thanks to all how answered.
Carl
AB1ZI

56666. Re: [TS-520_820_530_830] TS-830S low output with 6146B cathode resistors failing

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-09 19:25:15 UTC
From: Lou Everett, Sr.
Topic: 56664 Message: 56666

Did you check your finals in a tube tester?

Lou Everett, Sr., WA5LOU

On Wed, Mar 8, 2017 at 10:49 PM, incorridge@... [TS-520_820_530_830] <

TS-520_820_530_830@yahoogroups.com> wrote:

>
>
> Just getting back into ham radio after 30+ years. Never forgot Morse
> Code, but I can't read it as fast as I did as a kid. Thanks to all to
> posted here about their issues with low output; I used them today to
> eliminate some potential causes of this radio's low output.
>
> TS-830S "Gold" acquired recently, seller claimed working fine, but it
> turns out to provide only about 1W output on 40m and 15m; I didn't check
> the other bands.
>
> In TUNE mode, Plate control dips the meter in IP mode as expected, Drive
> peaks the meter in RF mode, so does Load, as expected. Conclusion: I have
> drive RF from the driver tube. But sometimes, max RF is at a different
> Plate setting than the setting that dips IP. The meter in RF mode goes
> about a quarter scale, but the external wattmeter barely moves, indicating
> about 1 W of RF getting out. I'm not sure what, if anything, this means.
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> Tuning in CW mode instead of TUNE mode gives similar results except that I
> can use the Carrier control to affect IP and IP rises pretty quickly.
>
> Screen Grid voltage 126V in TUNE mode, drops to 117 when I flip the SEND
> switch to run some power. 255V when in CW mode, drops to 242 V when
> transmitting. Goes to -57V when the SG switch is off. Conclusion: Screen
> Grid voltage okay.
>

> Summary of other things checked:
>
> Band switch shaft coupler inside and outside the cage is aligned; inside
> part of band switch is working.
>
> Plate choke is still red and looks new, no sign of heating.
>
> Entire radio is very clean inside and out; no sign of smoke getting out of
> other components.
>

> All resistors on PA PCB appear to be original colours and intact.
>
> Plate voltage is 900V according to the panel meter.
>
>
> Per advice found here and elsewhere, I checked the cathode resistors.
> They're not blown open, but they're not what they used to be! Originally
> 20 ohm, half-watt, 5% resistors, they're now 23, 35, 39, and 41 ohms!
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> I calculated that the 23 ohm resistor is dissipating a little less than a
> half a watt if IP is 200 mA; that should be okay. The others carry less
> current so should dissipate less.
>
> This means the cathode voltage is about 2.2 V higher than it should be
> which shouldn't matter. 2.2 V out of hundreds of volts - I don't see how
> that could make a difference...Oh, but that's how we measure IP! The
> cathode resistors are the shunt for the current meter! This means my IP
> indicates much higher than it actually is, so when I get the new resistors
> in there, I'll be able to readjust my bias control on the back and raise
> the Carrier control in CW mode, maybe that will help.
>
> Which raises the question for one of the experts here:
>
> 1. What situation would cause the cathode resistors to rise in value but
> not blow open? Is there something else I should look into before I try to
> tune this up again or transmit?
>
> And one other question:
>
> 2. Is 900 V okay for plate voltage? Should I check this with a real
> voltmeter on the top of the plate choke (scary)? Since the 6146B is rated
> for only 650 or 700 Vp, isn't Kenwood pushing it here?
>
> I'm so eager to use this radio! The HT-37 is long gone and the Tempo One
> isn't doing as well as it used to and I lost the 741-based CW audio filter
> I made for it so long ago.
>
> Thanks in advance to anyone who chimes in and helps me get back on the air!
>
> Cheers
>
> Halden NR7V
>
>
>

56667. Re: [TS-520_820_530_830] TS-830S low output with 6146B cathode resistors failing

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-10 14:58:02 UTC
From: drew@...
Topic: 56664 Message: 56667

One quick note...

Replace the cathode resistors that are off, they matter. You say that a 2.2 volts out of hundreds on the anodes can't matter. That's correct. But a few volts of cathode difference compared to the grid matter a lot! A few volts plus on the cathode is equivalent to a few volts minus bias on the grid. If the cathode resistors are wrong, bias is wrong. Get that right before you mess with much else.

73,
Drew K3PA

---In TS-520_820_530_830@yahoogroups.com, <loueverettsr@...> wrote :

Did you check your finals in a tube tester?

Lou Everett, Sr., WA5LOU

On Wed, Mar 8, 2017 at 10:49 PM, incorridge@... mailto:incorridge@... [TS-520_820_530_830] <TS-520_820_530_830@ yahoogroups.com mailto:TS-520_820_530_830@yahoogroups.com> wrote:

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Plate voltage is 900V according to the panel meter.

Per advice found here and elsewhere, I checked the cathode resistors. They're not blown open, but they're not what they used to be! Originally 20 ohm, half-watt, 5% resistors, they're now 23, 35, 39, and 41 ohms!
I calculated that the 23 ohm resistor is dissipating a little less than a half a watt if IP is 200 mA; that should be okay. The others carry less current so should dissipate less. This means the cathode voltage is about 2.2 V higher than it should be which shouldn't matter. 2.2 V out of hundreds of volts - I don't see how that could make a difference...Oh, but that's how we measure IP! The cathode resistors are the shunt for the current meter! This means my IP indicates much higher than it actually is, so when I get the new resistors in there, I'll be able to readjust my bias control on the back and raise the Carrier control in CW mode, maybe that will help.
Which raises the question for one of the experts here:
1. What situation would cause the cathode resistors to rise in value but not blow open? Is there something else I should look into before I try to tune this up again or transmit?
And one other question:
2. Is 900 V okay for plate voltage? Should I check this with a real voltmeter on the top of the plate choke (scary)? Since the 6146B is rated for only 650 or 700 Vp, isn't Kenwood pushing it here?
I'm so eager to use this radio! The HT-37 is long gone and the Tempo One isn't doing as well as it used to and I lost the 741-based CW audio filter I made for it so long ago.
Thanks in advance to anyone who chimes in and helps me get back on the air!
Cheers
Halden NR7V

56668. Re: [TS-520_820_530_830] TS-830S low output with 6146B cathode resistors failing

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-10 16:00:21 UTC
From: drew@...
Topic: 56664 Message: 56668

Mea culpa...let me correct this a bit.

A quick double check shows that typical grid bias on a 6146 is about -66V, so a few volts on the cathode is not huge. Enough to possibly make some difference. But as you note, these resistors are part of the metering circuit, so you do want them to be correct.

73,
Drew K3PA

---In TS-520_820_530_830@yahoogroups.com, <drew@...> wrote :

One quick note...

Replace the cathode resistors that are off, they matter. You say that a 2.2 volts out of hundreds on the anodes can't matter. That's correct. But a few volts of cathode difference compared to the grid matter a lot! A few volts plus on the cathode is equivalent to a few volts minus bias on the grid. If the cathode resistors are wrong, bias is wrong. Get that right before you mess with much else.

73,
Drew K3PA

---In TS-520_820_530_830@yahoogroups.com, <loueverettsr@...> wrote :

Did you check your finals in a tube tester?

Lou Everett, Sr., WA5LOU

On Wed, Mar 8, 2017 at 10:49 PM, incorridge@... mailto:incorridge@... [TS-520_820_530_830] <TS-520_820_530_830@ yahoogroups.com mailto:TS-520_820_530_830@yahoogroups.com> wrote:

Just getting back into ham radio after 30+ years. Never forgot Morse Code, but I can't read it as fast as I did as a kid. Thanks to all to posted here about their issues with low output; I used them today to eliminate some potential causes of this radio's low output.
TS-830S "Gold" acquired recently, seller claimed working fine, but it turns out to provide only about 1W output on 40m and 15m; I didn't check the other bands.
In TUNE mode, Plate control dips the meter in IP mode as expected, Drive peaks the meter in RF mode, so does Load, as expected. Conclusion: I have drive RF from the driver tube. But sometimes, max RF is at a different Plate setting than the setting that dips IP. The meter in RF mode goes about a quarter scale, but the external wattmeter barely moves, indicating about 1 W of RF getting out. I'm not sure what, if anything, this means.
Tuning in CW mode instead of TUNE mode gives similar results except that I can use the Carrier control to affect IP and IP rises pretty quickly.
Screen Grid voltage 126V in TUNE mode, drops to 117 when I flip the SEND switch to run some power. 255V when in CW mode, drops to 242 V when transmitting. Goes to -57V when the SG switch is off. Conclusion: Screen Grid voltage okay.

Summary of other things checked:
Band switch shaft coupler inside and outside the cage is aligned; inside part of band switch is working.
Plate choke is still red and looks new, no sign of heating.
Entire radio is very clean inside and out; no sign of smoke getting out of other components.
All resistors on PA PCB appear to be original colours and intact.
Plate voltage is 900V according to the panel meter.

Per advice found here and elsewhere, I checked the cathode resistors. They're not blown open, but they're not what they used to be! Originally 20 ohm, half-watt, 5% resistors, they're now 23, 35, 39, and 41 ohms!
I calculated that the 23 ohm resistor is dissipating a little less than a half a watt if IP is 200 mA; that should be okay. The others carry less current so should dissipate less.
This means the cathode voltage is about 2.2 V higher than it should be which shouldn't matter. 2.2 V out of hundreds of volts - I don't see how that could make a difference...Oh, but that's how we measure IP! The cathode resistors are the shunt for the current meter!
This means my IP indicates much higher than it actually is, so when I get the new resistors in there, I'll be able to readjust my bias control on the back and raise the Carrier control in CW mode, maybe that will help.
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I'm so eager to use this radio! The HT-37 is long gone and the Tempo One isn't doing as well as it used to and I lost the 741-based CW audio filter I made for it so long ago.
Thanks in advance to anyone who chimes in and helps me get back on the air!
Cheers
Halden NR7V

56669. international crystals

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-10 18:30:55 UTC
From: Joseph Stiles
Topic: 56669 Message: 56669

Greetings group,
If for some reason you can not read the below notice, International Crystal Manufacturingis closing shop.

PSE see below,

IMPORTANT NOTICE

73
Joe wb7uqugroup co-owner

56670. Re: [TS-520_820_530_830] international crystals

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-10 20:36:06 UTC
From: Jan Servaites
Topic: 56669 Message: 56670

Will the closing affect us? Do we buy xtals from them?
Jan N8CBX

On 3/10/2017 1:30 PM, Joseph Stiles stilesjoseph@...
[TS-520_820_530_830] wrote:
> International Crystal Manufacturing

This email has been checked for viruses by Avast antivirus software.
https://www.avast.com/antivirus

56671. Re: [TS-520_820_530_830] international crystals

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-10 20:50:42 UTC
From: John Davidson
Topic: 56669 Message: 56671

Back when I was servicing c0mmercial radios that still used channel crystals, I ordered a lot from International and Sentry Xtal co. !! My radio is Ham Radio...CW is Real Radio 73, John...K8JD

From: "Jan Servaites jservaites@... [TS-520_820_530_830]"
<TS-520_820_530_830@yahoogroups.com>
To: TS-520_820_530_830@yahoogroups.com
Sent: Friday, March 10, 2017 3:36 PM
Subject: Re: [TS-520_820_530_830] international crystals

  Will the closing affect us? Do we buy xtals from them?
Jan N8CBX

On 3/10/2017 1:30 PM, Joseph Stiles stilesjoseph@...
[TS-520_820_530_830] wrote:
> International Crystal Manufacturing

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https://www.avast.com/antivirus

56672. Re: international crystals

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-11 02:29:40 UTC
From: Brian Allen
Topic: 56669 Message: 56672

This is very sad. Another resource gone that help support the life of boat anchors. I spoke to them on several occasions. The lady that always answered was very knowledgeable one what was needed with boat anchors.
kb4mng

56673. Mode switch cracking

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-10 23:28:57 UTC
From: Joe
Topic: 56673 Message: 56673

Hello, I am currently working on my ts-530s and noticed the mode switch is crackling.

I looked at the switch hoping that there was some place I could spay some cleaner into it and work it back and forth, but the switch seems to be sealed.

Any ideas on how I might clean the switch (if that is the problem) ?

Thank you
Joe Ve7lsb

56674. Re: Mode switch cracking

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-11 18:00:19 UTC
From: wagstw46@...
Topic: 56673 Message: 56674

Joe:

From bottom side look at the stack of blue decks and you should see that they have a rectangular indexing or anti-rotation tab and mating slot. There is a very small clearance gap at this junction of the deck mating surfaces.

Apply small amount of De-oxit D5 with an artist brush at this point and rotate bandswitch multiple times bnack and forth and you should see the liquid wick its way down into this space. Have to repeat application several times.Can also apply the plastic nozzle of canned air at this point and try to force the cleaner down into the deck area.

After multiple applications blow off the residual cleaner from the blue plastic decks as D5 has high concentration of Naptha which is very strong solvent. Right below gasoline on the fractioning column. It will eventually evaporate, but I prefer to blow off the excess. I use 30lb compressed air from my under bench shop air compressor. Absent that canned air will work.

Sometimes this procedure will quiet the switch down. One of the problems that the TS530 and TS830 series suffer with. I know of no NOS or like for like sub switches.

Terry K9TW

56675. Re: TS-830S still low output with cathode resistors fixed

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-11 21:11:45 UTC
From: incorridge@...
Topic: 56664 Message: 56675

Thanks for the comments! I replaced the cathode resistors with metal film 1% tolerance and verified cathode to ground DC resistance 5.0 ohms. Readjusted IP bias to 60 mA.
Verified Vp is 912 V when not transmitting.
RF meter adjustment pot is at about 20% and internal meter still shows strong RF.
Antenna relay appears clean, but contact resistances were unstable and poor. Light scraping with knife and alcohol cleaning brought it back. Also lightly scraped contacts in relay socket.
Verified continuity from relay socket to SO239 output and relay socket to tank coil. DC resistance from tank coil L4 to ground is 3 ohms; I assume this is the choke L5 470 uH.
Tried all bands. IP dip with PLATE works as expected on all bands except 20m and 15m. RF per internal meter responds as expected to adjustment of DRIVE, LOAD, and PLATE controls for all bands except LOAD maxes out at end of range on 160m.
I can get IP around 250 mA or a little more 160m - 15m and 150-200 mA on 10m.
Power output is 0.5 to 1 W on all bands except 10m, where it is 4 W.
Q1. Since IP is normal, can I safely conclude that the driver and 6146Bs are fine?
Q2. Since internal RF meter gives strong readings, can I safely conclude that C7 is okay?
Q3. Does having more RF output at 10m provide a clue?
Q4. Does no IP dip on 20m and 15m provide a clue?
Any other thoughts?
73
Halden NR7V

56676. Re: [TS-520_820_530_830] Mode switch cracking

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-11 04:08:50 UTC
From: Lou Everett, Sr.
Topic: 56673 Message: 56676

Check for loose wires and bad soldier joints.

Lou Everett, Sr., WA5LOU

ARRL Official Observer Coordinator, Indiana Section

Telephone: 317-749-9883

On Fri, Mar 10, 2017 at 6:28 PM, Joe outwestcw@gmail.com mailto:outwestcw@gmail.com [TS-520_820_530_830] <TS-520_820_530_830@yahoogroups.com mailto:TS-520_820_530_830@yahoogroups.com> wrote:
Hello, I am currently working on my ts-530s and noticed the mode switch is crackling.

I looked at the switch hoping that there was some place I could spay some cleaner into it and work it back and forth, but the switch seems to be sealed.

Any ideas on how I might clean the switch (if that is the problem) ?

Thank you
Joe Ve7lsb

56677. Re: Mode switch cracking

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-11 20:18:45 UTC
From: Joe
Topic: 56673 Message: 56677

Thank you Terry for this advice, I will defiantly give it a try! ☐

Much appreciated!
Joe
Ve7lsb

56678. just something funny

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-12 03:20:53 UTC
From: Joseph Stiles
Topic: 56678 Message: 56678

totally off topic, but thought the group could use a laugh....
this is the response I received when I asked a possible member to furtheridentify themselves(we do filter potential applicants...hihi) email address removed

I will unfortunately have to pass on this group as it is my policy not to put any identifying or personal information on the internet for security sake. Identity theft and government spying is now all too widely known to exist, and I choose protect myself, and to exercise my 4th amendment right to privacy. Use it or loose it. And I would not wish to registrar my radios anymore than I would wish to registrar my firearms. One day they may come for our equipment and the operator. Good luck.

On Mon, Mar 6, 2017 at 9:50 AM, stilesjoseph@... [TS-520_820_530_830] <TS-520_820_530_830-noreply@yahoogroups.com> wrote:

> THIS IS NOT SPAM
>
>
> PSE verify ur name, call and qth
>
> tnx n 73
>
> Joe wb7uqu
> group co-owner
>
>

 73
Joe wb7uqu

56679. Re: [TS-520_820_530_830] just something funny

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-12 13:32:34 UTC
From: BOB KG6DHQ
Topic: 56678 Message: 56679

Quick reply...I guess he does not use a "Call Sign " either.....Bob Holland, KG6DHQ

On Sat, 3/11/17, Joseph Stiles stilesjoseph@... [TS-520_820_530_830]
<TS-520_820_530_830@yahoogroups.com> wrote:

Subject: [TS-520_820_530_830] just something funny
To: "Kenwood hybrid group" <TS-520_820_530_830@yahoogroups.com>
Date: Saturday, March 11, 2017, 8:20 PM

totally
off topic, but thought the group could use a
laugh....
this
is the response I received when I asked a possible member to
furtheridentify
themselves(we do filter potential applicants...hihi) email
address removed

I
will unfortunately have to pass on this group as it is my
policy not to
put any identifying or personal information on the internet
for security
sake. Identity theft and government spying is now all too
widely known to
exist, and I choose protect myself, and to exercise my 4th
amendment right
to privacy. Use it or loose it. And I would not wish to
registrar my
radios anymore than I would wish to registrar my firearms.
One day they may
come for our equipment and the operator. Good luck.

On Mon, Mar 6, 2017 at 9:50 AM, stilesjoseph@...
[TS-520_820_530_830]
<TS-520_820_530_830-noreply@yahoogroups.com> wrote:

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> PSE verify ur name, call and qth
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>
> Joe wb7uqu
> group co-owner

>
>

 73
Joe wb7uqu

56680. Re: TS-830S still low output with cathode resistors fixed

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-12 14:50:00 UTC
From: wagstw46@...
Topic: 56664 Message: 56680

I have no idea how you cleaned the contacts of the MX-2P relay with a pocket knife! Certainly not good practice. Never want to remove the flash. Also,very easy to bend the movable leafs and change the contact pressure and contact wipe.

Proper way to clean is by running strips of copy/printer paper wetted with DeOxit while applying lite pressure to the armature. Better method is to clean electrically by applying 6 to 12vdc current limited to 5 amps thru the contacts and repeatedly cycling the closing coil with the current applied.

Assuming you no longer have an open or very high resistance Ant TR relay NO contact there are a couple other possibilities.

1. The solder connection on the bare tinned lead wire inside the PA cage at the SO-239 antenna connector is not soldered. I have seen a couple that could be pulled out of the center pin due to bad factory soldering.

2. You have an open coax jumper between the SO-239 and your in line wattmeter. Change out the jumper.

3. If the coax jumper isnt the problem then try another antenna. Can have bad PL-259 connection on the end of the antenna feedline being connected to the wattmeter or an open at the antenna termination.

You can unscrew you coax jumper or antenna feed line on any TS830S and load the rig into an open and it can fool you into thinking you are loading. You will see much higher than normal RF voltage on the RF relative power meter position and you will see plate current dip. It wont be normal, but it can fool someone who doesnt have much experience.

Loading into an open will result in high RF voltage across the plates of the Plate Load capacitor and can cause the capacitor to arc over so not recommending this test to average Hybrid owner. It is safer to do on the 830 as it employs RF negative feedback which will roll back the RF drive that is being presented by the very high SWR that an open presents. Normal RF at 100 watts is 71 rms rf volts. With an open this can go up to around 200rms RF volts.

Go to my website and read why I recommend to new folks to use an in line wattmeter to load their Hybrids. In addition to a loading tool it is a way to troubleshoot for just the thing you are seeing. High RF relative power meter indication and low RF output on wattmeter normally indicates loading into a very high impedance or a bad wattmeter.

Terry K9TW

56681. Wire wrap posts replacements?

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-12 16:23:52 UTC
From: Jan Servaites
Topic: 56681 Message: 56681

If I were to replace all the wire-wrapping posts on an old TS511 PCB (so much oxidation on the posts, that solder isn't sticking), what would one replace them with?
Jan N8CBX

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https://www.avast.com/antivirus

56682. Re: Wire wrap posts replacements?

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-12 17:13:48 UTC
From: wagstw46@...
Topic: 56681 Message: 56682

Jan:

An undisturbed factory wire wrap termination should be moisture and gas impermeable. Only place should have any oxidation/ corrosion would be at the exposed top or bottom of the post area. What are you looking at that tells you they all need to be replaced? Does this rig have history of improperly done wire wraps from the factory?

If you have to unwrap a wire wrap terminal post for servicing or PC board replacement then best to file the top of the post to brite metal and make one wrap with freshly exposed copper conductor and tack solder.

When disturbed and a sloppy attempt to re-wrap is when things can go wrong. Should never attempt to re-wrap the removed conductor as it work hardens in the original wrapping process and is very brittle. If there is enough slack to pull up and prep the end of wire with fresh conductor and you have the proper size hand wrapping tool then you can re-wrap.

\
My 2 cents worth.

Terry K9TW

56683. Re: [TS-520_820_530_830] Re: Wire wrap posts replacements?

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-12 17:58:22 UTC
From: Jan Servaites
Topic: 56681 Message: 56683

Terry,
Well, I have to remove one/two boards for repair. I suspect there's too much corrosion (or some film, nicotine?) on the posts to accept any solder. I have spent too much time scrapping the posts & cleaning the _bare copper, single core, crappy wire_ to get a good soldering joint, along with a dab of flux, but no luck. It's too labor intensive to do this to about 2 dozen posts and then question later if the solder joint became ohmic or not. The 511 isn't like repairing a later & cleaner 830, and finding & replacing a lot of problems with miniature coax leads fracturing at the solder joints or the wire-wrap posts. I'm replacing most all of the miniature coax with white-teflon jacked, silver plated, stranded-wire coax (I don't remember the proper RG designation for it, it certainly is mil spec'd)
I have removed a few posts and directly soldered to the PCB foil, where it permits me to do that and it solders great, but I CAN'T do that to the whole board, so I need to find a solution.
So, I NEED a solution here and it looks like I need to find a solder terminal post to replace the w/w posts. I'll look in my Keystone catalog and see what I can use. By the way, my TS500 & TS510 use solder terminals on the PCB (before the use of wire-wrapping) and haven't had any issues with them.
Also to mention and aimed at 511 owners, that the trimmer pots need replacement. These are very hard to find, but I found some at "Parts Express" & MCM electronics.

Terry, these older 500 series must have been moved out of the house and stored on a shelf in the garage. All of mine were DOA and pretty dirty, so the corrosion really took hold.
Cheers,
Jan N8CBX

56684. Re: Wire wrap posts replacements?

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-12 17:32:04 UTC
From: croberts@...
Topic: 56681 Message: 56684

Jan,
I've wondered about the whole process of unwrapping a board in able to work on it. So I'd love to hear thoughts like your question
I know that I can get actual wire wrap pins (several sizes and options) but I don't the specs of what Kenwood used.
Another thought that I had was to pull wire wrap pins (de-soldering and cleaning things up) and replacing them with gold/gold connectors instead of solder.
There is just no room to do proper wire wrap without pulling all of the wire and re-doing the complete harness.

So what would be the best practice if I need to pull a complete board and unwrap all of the wires? Solder joints? Gold on gold connectors?

Chuck
N2KWO

56685. Re: TS-830S still low output with cathode resistors fixed

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-12 05:56:10 UTC
From: ron@...
Topic: 56664 Message: 56685

just wondering how your plate choke looks.

56686. Re: Wire wrap posts replacements?

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-12 17:04:45 UTC
From: k2dfc@...
Topic: 56681 Message: 56686

Why not just clean them.
K2DFC

---In TS-520_820_530_830@yahoogroups.com, <jservaites@...> wrote :

If I were to replace all the wire-wrapping posts on an old TS511 PCB (so much oxidation on the posts, that solder isn't sticking), what would one replace them with?
Jan N8CBX

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56687. RFE -100 Digital Display for TS520

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-12 17:07:07 UTC
From: Steve Widdett
Topic: 56687 Message: 56687

Hello Group,

I have an old RF -100 Digital Display which I am told was for the TS520.
There are three phono sockets on the back marked with colored stickers yellow, red and blue.
Does anyone know how this connects to the 520, or have a manual for it?

Thanks and 73

Steve
W8SAW

Sent from my iPhone

> On Mar 8, 2017, at 22:49, incorridge@... [TS-520_820_530_830] <TS-520_820_530_830@yahoogroups.com> wrote:
>
> Just getting back into ham radio after 30+ years. Never forgot Morse Code, but I can't read it as fast as I did as a kid. Thanks to all to posted here about their issues with low output; I used them today to eliminate some potential causes of this radio's low output.
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> TS-830S "Gold" acquired recently, seller claimed working fine, but it turns out to provide only about 1W output on 40m and 15m; I didn't check the other bands.
>
> In TUNE mode, Plate control dips the meter in IP mode as expected, Drive peaks the meter in RF mode, so does Load, as expected. Conclusion: I have drive RF from the driver tube. But sometimes, max RF is at a different Plate setting than the setting that dips IP. The meter in RF mode goes about a quarter scale, but the external wattmeter barely moves, indicating about 1 W of RF getting out. I'm not sure what, if anything, this means.
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> Tuning in CW mode instead of TUNE mode gives similar results except that I can use the Carrier control to affect IP and IP rises pretty quickly.
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> Screen Grid voltage 126V in TUNE mode, drops to 117 when I flip the SEND switch to run some power. 255V when in CW mode, drops to 242 V when transmitting. Goes to -57V when the SG switch is off. Conclusion: Screen Grid voltage okay.
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> Summary of other things checked:
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> Band switch shaft coupler inside and outside the cage is aligned; inside part of band switch is working.
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> Plate choke is still red and looks new, no sign of heating.
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> Entire radio is very clean inside and out; no sign of smoke getting out of other components.

>
> All resistors on PA PCB appear to be original colours and intact.
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> Plate voltage is 900V a ccording to the panel meter.
>
>
>
> Per advice found here and elsewhere, I checked the cathode resistors. They're not blown open, but they're not what they used to be! Originally 20 ohm, half-watt, 5% resistors, they're now 23, 35, 39, and 41 ohms!
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> I calculated that the 23 ohm resistor is dissipating a little less than a half a watt if IP is 200 mA; that should be okay. The others carry less current so should dissipate less.
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> This means the cathode voltage is about 2.2 V higher than it should be which shouldn't matter. 2.2 V out of hundreds of volts - I don't see how that could make a difference...Oh, but that's how we measure IP! The cathode resistors are the shunt for the current meter! This means my IP indicates much higher than it actually is, so when I get the new resistors in there, I'll be able to readjust my bias control on the back and raise the Carrier control in CW mode, maybe that will help.
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>
> I'm so eager to use this radio! The HT-37 is long gone and the Tempo One isn't doing as well as it used to and I lost the 741-based CW audio filter I made for it so long ago.
>
> Thanks in advance to anyone who chimes in and helps me get back on the air!
>
> Cheers
>
> Halden NR7V
>
>

56688. Re: just something funny

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-12 17:15:08 UTC
From: croberts@...
Topic: 56678 Message: 56688

What is ever more funny is that his email is posted, like all of ours are.
Thanks, Ops, for culling that out.

56689. Re: [TS-520_820_530_830] Re: TS-830S still low output with cathode resistors fixed

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-12 03:48:37 UTC
From: Lou Everett, Sr.
Topic: 56664 Message: 56689

Did you check test you finals with a tester?

Lou Everett, Sr., WA5LOU

ARRL Official Observer Coordinator, Indiana Section

Telephone: 317-749-9883

On Sat, Mar 11, 2017 at 4:11 PM, incorridge@yahoo.com mailto:incorridge@yahoo.com [TS-520_820_530_830] <TS-520_820_530_830@yahoogroups.com mailto:TS-520_820_530_830@yahoogroups.com> wrote:
Thanks for the comments!
I replaced the cathode resistors with metal film 1% tolerance and verified cathode to ground DC resistance 5.0 ohms. Readjusted IP bias to 60 mA.
Verified Vp is 912 V when not transmitting.
RF meter adjustment pot is at about 20% and internal meter still shows strong RF.
Antenna relay appears clean, but contact resistances were unstable and poor. Light scraping with knife and alcohol cleaning brought it back. Also lightly scraped contacts in relay socket.
Verified continuity from relay socket to SO239 output and relay socket to tank coil. DC resistance from tank coil L4 to ground is 3 ohms; I assume this is the choke L5 470 uH.
Tried all bands. IP dip with PLATE works as expected on all bands except 20m and 15m. RF per internal meter responds as expected to adjustment of DRIVE, LOAD, and PLATE controls for all bands except LOAD maxes out at end of range on 160m.
I can get IP around 250 mA or a little more 160m - 15m and 150-200 mA on 10m.
Power output is 0.5 to 1 W on all bands except 10m, where it is 4 W.
Q1. Since IP is normal, can I safely conclude that the driver and 6146Bs are fine?
Q2. Since internal RF meter gives strong readings, can I safely conclude that C7 is okay?
Q3. Does having more RF output at 10m provide a clue?
Q4. Does no IP dip on 20m and 15m provide a clue?
Any other thoughts?
73
Halden NR7V

56690. RE: [TS-520_820_530_830] Re: just something funny

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-12 18:47:18 UTC
From: Joe
Topic: 56678 Message: 56690

What are you referring to?

(It helps if you would do a ‘cut and paste’ of whatever you are referring to.! Many of us only read these posts via ou4r native email reader, and delete them as read. We have no way of going back to see if the referred to

post was of any interest to us! (And have no interest in battling the demons of YahooGroups to read up on website posts!)

One more thing, (And I am **NOT** a mod here) Signing your posts with at least you call sign, is sort of a courtesy in ham groups! J

Joe – W7RKN

From: TS-520_820_530_830@yahoogroups.com [mailto:TS-520_820_530_830@yahoogroups.com]
Subject: [TS-520_820_530_830] Re: just something funny

What is ever more funny is that his email is posted, like all of ours are.
Thanks, Ops, for culling that out.

56691. Re: Wire wrap posts replacements?

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-12 19:11:35 UTC
From: scottandalene@...
Topic: 56681 Message: 56691

Just my experience on wire wraps. I had to replace a burned out rectifier board on my TS-830S. The rectifier board is a mass of wire wrap connections. I struggled with removing one and trying to solder on to the post but gave up. Luckily the replacement board had short wires still attached to the wire wrap, so I just spliced these wires to the existing leads that I had cut off, and then used shrink wrap to cover the spliced joints. Not as neat looking as the original but it worked fine and I could leave the wire wraps undisturbed.

Scott, N6CIC

56692. Re: [TS-520_820_530_830] Re: Wire wrap posts replacements?

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-12 19:08:42 UTC
From: Jan Servaites
Topic: 56681 Message: 56692

Chuck,
Well, I don't know what the "best" practice is but one option that I used on a 530 AVR board swap was to clip the wire about 3-4 inches from the post and then solder the wires in a bare wire connection w/shrink tubing insulation, and skipped trying to solder to the w/w posts. In that way the bare wire is pretty clean & bright and can take solder fairly easy. Of course, the other option is one can tin the w/w posts and solder there too.
Cheers,
Jan N8CBX

On 3/12/2017 1:32 PM, croberts@... [TS-520_820_530_830] wrote:
>
> So what would be the best practice if I need to pull a complete
> board and unwrap all of the wires? Solder joints? Gold on gold
> connectors?
>
> Chuck
> N2KWO
>
>

56693. Re: [TS-520_820_530_830] Re: Wire wrap posts replacements?

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-12 19:24:08 UTC
From: Jan Servaites
Topic: 56681 Message: 56693

Terry,
I am seeing this as a problem with the_TS511 ONLY_, and probably not so much with the later 500/800 series apparently.
Jan N8CBX

On 3/12/2017 1:13 PM, wagstw46@... [TS-520_820_530_830] wrote:
> An undisturbed factory wire wrap termination should be moisture and
> gas impermeable. Only place should have any oxidation/ corrosion would
> be at the exposed top or bottom of the post area. What are you
> looking at that tells you they all need to be replaced?

56694. Re: TS-830S still low output with cathode resistors fixed

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-12 21:22:08 UTC
From: wagstw46@...
Topic: 56664 Message: 56694

I thought he said that he had very good RF relative power indication with the RF sensitivity pot at only 20% . If that is true not likely that RF Plate choke, RF Bypass cap, and/or Plate Block/coupling cap are bad.

All three of these can be the reason for low RF output on all bands when you have good RF drive available at the control grids of the Finals (good full scale ALC indication in Tune mode with no need to advance CAR level pot much above 1200).

However, since the RF voltage divider resistors tap off right at the NO contact of the Ant TR relay I wouldnt expect to see high RF voltage present there.

Hey stranger things have happened. See a few Driver tube L36 Plate chokes bad and usually results in very low power just on 18 and 21 mhz bands.

TS830 uses solenoid wound Plate choke and if it has a turn to turn short usually the center of the winding will be the most discolored as RF voltage highest there. I see a few RF bypass caps at base of the choke that the ceramic body is cracked/split and once in awhile one with hole blown in the body.

Appears that tubes are OK as able to load to 250ma. Could do a dc static test by running bias voltage down until reach full scale Ip and hold there for a couple of seconds to make sure it doesnt fall off. Must have PA cage cover off and closely watch the plates and should see NO hint of orange color begin to show. Transformer will complain a little and glass envelopes may "tink". Not recommended as a routine test and not for the faint hearted! Best to just sub set of known good spare Final tubes.

The clue to me is the reported high RF relative power indication if I understand what he is reporting.

Terry K9TW

56695. Hybrid Net Update (March 12, 2017)

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-12 22:49:08 UTC
From: Mark Gilger
Topic: 56695 Message: 56695

Net Info:
Saturday: 7.235 ☐ 7.233 @ 3:30pm Eastern following the Swan Tech Net
Sunday: 14.316 @ 1800 UTC following the ICOM net

Web Site:
<http://www.wb4hfn.com/KENWOOD/KenwoodHomePage.htm>http://www.wb4hfn.com/KENWOOD/KenwoodHomePage.htm

The net started its existence on November 1st,
2011. The yearly check-in totals are posted at the bottom of this message.

The Saturday net was run by me, WB0IQK. There
were 8 stations checking in under GOOD band conditions.

We had the following number of radios checking in.
1 running TS-520(x)
2 running TS-530(x)
1 running TS-820(x)
3 running TS-830S
0 running TS-510
0 running TS-511
0 running TS-515
0 running 599 twins
0 running TS-900

I was running my TS-830S + Drake L4B amplifier.

The Sunday net was run by me, WB0IQK. There were
14 stations checking in under POOR band conditions.

We had the following number of radios checking in.
1 running TS-520(x)
0 running TS-530(x)
2 running TS-820(x)
5 running TS-830S
0 running TS-510
0 running TS-511
0 running TS-515
0 running 599 twins
1 running TS-900

I was running my TS-830S + Drake L-4B amplifier.

We have been having several people checking in
regularly with their TS-430, TS-440, and
TS-940☐s, which of course is not a hybrid,
although over 30+ years old. Everyone is welcome

as long as they have an interest in the older equipment.

If anyone would be interested in filling in as a
net control station, please send me an email.
Currently it's just myself, Jimmy, WB2KNR, and
Greg, WQ0P, and Rodger, K1HH has agreed to help
with relays . I would like to get several more.
If we do, we can alternate so everyone might be
on a 3-4 week rotation. It's a lot of fun and a
good way to make sure you station is optimized.

For anyone that has not heard, we have a new web
site that WB4HFN is hosting. He currently has a
very nice site for Drake, Collins and Heathkit
and now Kenwood Hybrids. Good quality manuals
plus sale flyers and brochures will be found
here, along with user supplied information for all Hybrids.

His URL is:
<http://www.wb4hfn.com/KENWOOD/KenwoodHomePage.htm>http://www.wb4hfn.com/KENWOOD/KenwoodHo
mePage.htm

To date, we have had the following check-in:

Nov. 2011 ☐ Oct. 2012 Saturday total 754
check-ins, Sunday total 563 check-ins
Nov. 2012 - Oct. 2013 Saturdays total 828 check-ins, Sunday total 609 check-ins
Nov. 2013 - Oct. 2014 Saturdays total 842 check-ins, Sunday total 744 check-ins
Nov. 2014 ☐ Oct 2015 Saturdays total 962 check-ins, Sunday total 669 check-ins
Nov. 2015 ☐ Oct 2016 Saturdays total 807 check-ins, Sunday total 628 check-ins

November 2016, Saturday net total = 80, Sunday total = 68
December 2016, Saturday net total = 73, Sunday total = 69
January 2017, Saturday net total = 50, Sunday total = 90
February 2017, Saturday net total = 85, Sunday total = 66
March 2017, Saturday net total = 22, Sunday total = 23 (Month to date)

Net Info:
Saturday: 7.235 @ 3:30 Eastern following the Swan Tech Net
Sunday: 14.316 @ 1800 UTC following the ICOM net

Web Site:
<http://www.wb4hfn.com/KENWOOD/KenwoodHomePage.htm>http://www.wb4hfn.com/KENWOOD/KenwoodHo
mePage.htm

73's,
Mark, WB0IQK

56696. Re: [TS-520_820_530_830] Re: Wire wrap posts replacements?

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-12 23:15:50 UTC
From: John Davidson
Topic: 56681 Message: 56696

I had a TS700A Vhf rig that was a nightmare of interconnected boards with wire wrapped connections. My radio is Ham Radio...CW is Real Radio 73, John...K8JD

From: "Jan Servaites jservaites@... [TS-520_820_530_830]"
<TS-520_820_530_830@yahoogroups.com>
To: TS-520_820_530_830@yahoogroups.com
Sent: Sunday, March 12, 2017 3:24 PM
Subject: Re: [TS-520_820_530_830] Re: Wire wrap posts replacements?

  Terry,
I am seeing this as a problem with the TS511 ONLY, and probably not so much with the later 500/800 series apparently.
Jan N8CBX

On 3/12/2017 1:13 PM, wagstw46@... [TS-520_820_530_830] wrote:

  An undisturbed factory wire wrap termination should be moisture and gas impermeable. Only place should have any oxidation/ corrosion would be at the exposed top or bottom of the post area. What are you looking at that tells you they all need to be replaced?

56697. Re: [TS-520_820_530_830] just something funny

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-13 01:30:04 UTC
From: JP Douglas
Topic: 56678 Message: 56697

That IS funny!
That person is actually telling you that he has both firearms and radios, which he stated is what he apparently does not want to do at all costs!
Wouldn't it be better to just go with the flow???
I figure if they come for my radios I'll give them the Yaesu, no way are they coming anywhere near my Kenwoods, I'll just have to use my firearms for protection, no way am I going to throw my TS-830S at them although as much as it weighs, it'll probably do the trick...LOL

7 3 de Jose Douglas, KB1TCD

Sent from my iPad

> On Mar 11, 2017, at 10:20 PM, Joseph Stiles stilesjoseph@yahoo.com [TS-520_820_530_830] <TS-520_820_530_830@yahoogroups.com> wrote:
>
>
>
> totally off topic, but thought the group could use a laugh....
>
> this is the response I received when I asked a possible member to further
> identify themselves(we do filter potential applicants...hihi) email address removed
>
> I will unfortunately have to pass on this group as it is my policy not to
> put any identifying or personal information on the internet for security
> sake. Identity theft and government spying is now all too widely known to
> exist, and I choose protect myself, and to exercise my 4th amendment right
> to privacy. Use it or loose it. And I would not wish to registrar my
> radios anymore than I would wish to registrar my firearms. One day they may
> come for our equipment and the operator. Good luck.
>
> On Mon, Mar 6, 2017 at 9:50 AM, stilesjoseph@... [TS-520_820_530_830]
> <TS-520_820_530_830-noreply@yahoogroups.com> wrote:
>
> > THIS IS NOT SPAM
> >
> >
> > PSE verify ur name, call and qth
> >
> > tnx n 73
> >
> > Joe wb7uqu
> > group co-owner
> >
> >
>

>
> 73
> Joe wb7uqu
>
>
>

56698. Re: [TS-520_820_530_830] Re: Wire wrap posts replacements?

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-12 20:19:22 UTC
From: Joe
Topic: 56681 Message: 56698

Hi, my method might sound a bit brutal...but on my p.a. Board on my ts-530, I found a badly corroded copper trace connected to one of the posts.

The trace had lifted off the board and the original wrapped wire was re-soldered (blobbed) back on (not by me...lol)

I desoldered the blob of solder and de-soldered where it was originally soldered to the corroded trace, and removed the post.
Next I cleaned it (lightly) with 1000 grit (wet and dry) sand paper and contact cleaner.

Then I removed the rotten trace back to where it was healthy...and soldered a new copper wire to it and re wrapped it around the clean post, also I rewrapped the original wire on to the post and they soldered beautifully ☐

Joe

Sent from my iPad

56699. Re: [TS-520_820_530_830] just something funny

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-13 02:28:44 UTC
From: Joseph Stiles
Topic: 56678 Message: 56699

Joe-w7rkn,
I did a cut and paste, but I did edit out the persons email address.

I took it off the moderator/group owner area of this site where membership requestsshow up, there was no other post to refer to. Many fail to include any information whatsoever...so I query them...just trying to help keep the group clean. Sorry you could not read the post, and my post was signed.
Just thought the group could use a laugh, and see just a small sample to what themoderators/co-owners deal with.

73
Joe wb7uqugroup co-owner

On Sunday, March 12, 2017 6:36 PM, "JP Douglas kb1tcd@... [TS-520_820_530_830]" <TS-520_820_530_830@yahoogroups.com> wrote:

That IS funny!That person is actually telling you that he has both firearms and radios, which he stated is what he apparently does not want to do at all costs!Wouldn't it be better to just go with the flow???I figure if they come for my radios I'll give them the Yaesu, no way are they coming anywhere near my Kenwoods, I'll just have to use my firearms for protection, no way am I going to throw my TS-830S at them although as much as it weighs, it'll probably do the trick...LOL
7 3 de Jose Douglas, KB1TCD

Sent from my iPad
On Mar 11, 2017, at 10:20 PM, Joseph Stiles stilesjoseph@... [TS-520_820_530_830] <TS-520_820_530_830@yahoogroups.com> wrote:

totally off topic, but thought the group could use a laugh....
this is the response I received when I asked a possible member to furtheridentify themselves(we do filter potential applicants...hihi) email address removed

I will unfortunately have to pass on this group as it is my policy not to
put any identifying or personal information on the internet for security
sake. Identity theft and government spying is now all too widely known to
exist, and I choose protect myself, and to exercise my 4th amendment right
to privacy. Use it or loose it. And I would not wish to registrar my
radios anymore than I would wish to registrar my firearms. One day they may
come for our equipment and the operator. Good luck.

On Mon, Mar 6, 2017 at 9:50 AM, stilesjoseph@... [TS-520_820_530_830] <TS-520_820_530_830-noreply@yahoogroups.com> wrote:

> THIS IS NOT SPAM
>
>
> PSE verify ur name, call and qth

>
> tnx n 73
>
> Joe wb7uqu
> group co-owner
>
>

73
Joe wb7uqu

56700. Re: [TS-520_820_530_830] Mode switch cracking

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-12 19:15:44 UTC
From: Joe
Topic: 56673 Message: 56700

Thank-you Lou and Terry.
I checked for cold solder joints and everything I looked at on the switch looked good☐
I did find the little space to apply cleaner to the switch, and did so. Now the switch works perfectly fine, no more crackling ☐

Thanks again!
Joe

Sent from my iPad

56701. RE: [TS-520_820_530_830] just something funny

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-13 04:38:12 UTC
From: Joe
Topic: 56678 Message: 56701

Joe…I was talking about the other guy…SHEESH! Not YOU!! I know you!

And yes, it *was* funny.

Jeeze, now I am gonna have to go back and reread..I actually went to the group site and responded there, or so I thought.

I do apologize to you. Now I am embarrassed!

Joe – W7RKN

From: TS-520_820_530_830@yahoogroups.com [mailto:TS-520_820_530_830@yahoogroups.com]
Subject: Re: [TS-520_820_530_830] just something funny

Joe-w7rkn,

I did a cut and paste, but I did edit out the persons email address.

I took it off the moderator/group owner area of this site where membership requests

show up, there was no other post to refer to. Many fail to include any information whatsoever...so I query them...just trying to help keep the group clean. Sorry you could not read the post, and my post was signed.

Just thought the group could use a laugh, and see just a small sample to what the

moderators/co-owners deal with.

73

Joe wb7uqu

group co-owner

On Sunday, March 12, 2017 6:36 PM, "JP Douglas kb1tcd@... [TS-520_820_530_830]" <TS-520_820_530_830@yahoogroups.com> wrote:

That IS funny!

That person is actually telling you that he has both firearms and radios, which he stated is what he apparently does not want to do at all costs!

Wouldn't it be better to just go with the flow???

I figure if they come for my radios I'll give them the Yaesu, no way are they coming anywhere near my Kenwoods, I'll just have to use my firearms for protection, no way am I going to throw my TS-830S at them although as much as it weighs, it'll probably do the trick...LOL

7 3 de Jose Douglas, KB1TCD

Sent from my iPad

On Mar 11, 2017, at 10:20 PM, Joseph Stiles stilesjoseph@... [TS-520_820_530_830] <TS-520_820_530_830@yahoogroups.com> wrote:

totally off topic, but thought the group could use a laugh....

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On Mon, Mar 6, 2017 at 9:50 AM, stilesjoseph@... [TS-520_820_530_830] <TS-520_820_530_830-noreply@yahoogroups.com> wrote:

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>
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>
> tnx n 73
>
> Joe wb7uqu
> group co-owner
>
>

73
Joe wb7uqu

56702. Re: [TS-520_820_530_830] just something funny

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-13 11:24:49 UTC
From: Jeff Wimmer
Topic: 56678 Message: 56702

Another funny thing is, the fact he even posted an email revealed who he was. If he doesn't realize the government already can track him to his QTH by IP address because he posted an email, he's either naive, or covering something up. Either way, that's funny right there!!
73

Jeff - W5JGW

On Sunday, March 12, 2017 11:47 PM, "Joe w7rkn.7@gmail.com [TS-520_820_530_830]" <TS-520_820_530_830@yahoogroups.com> wrote:

Joe…I was talking about the other guy…SHEESH! Not YOU!! I know you! And yes, it *was* funny. Jeeze, now I am gonna have to go back and reread..I actually went to the group site and responded there, or so I thought. I do apologize to you. Now I am embarrassed! Joe – W7RKN From: TS-520_820_530_830@yahoogroups.com [mailto:TS-520_820_530_830@yahoogroups.com]
Subject: Re: [TS-520_820_530_830] just something funny

Joe-w7rkn, I did a cut and paste, but I did edit out the persons email address. I took it off the moderator/group owner area of this site where membership requestsshow up, there was no other post to refer to. Many fail to include any information whatsoever...so I query them...just trying to help keep the group clean. Sorry you could not read the post, and my post was signed. Just thought the group could use a laugh, and see just a small sample to what themoderators/co-owners deal with. 73Joe wb7uqugroup co-owner On Sunday, March 12, 2017 6:36 PM, "JP Douglas kb1tcd@... [TS-520_820_530_830]" <TS-520_820_530_830@...m> wrote: That IS funny!That person is actually telling you that he has both firearms and radios, which he stated is what he apparently does not want to do at all costs!Wouldn't it be better to just go with the flow???I figure if they come for my radios I'll give them the Yaesu, no way are they coming anywhere near my Kenwoods, I'll just have to use my firearms for protection, no way am I going to throw my TS-830S at them although as much as it weighs, it'll probably do the trick...LOL 7 3 de Jose Douglas, KB1TCD

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> THIS IS NOT SPAM> > > PSE verify ur name, call and qth> > tnx n 73> > Joe wb7uqu> group co-owner> > 73
Joe wb7uqu

56703. Re: TS-830S low output with 6146B cathode resistors failing

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-13 06:32:02 UTC
From: incorridge@...
Topic: 56664 Message: 56703

Thanks, Drew, for commenting on the cathode resistors. With IP way off, that had to be fixed before going further. That's done, and now that I understand what's inside my so-called "wattmeter", I should have this on the air soon. Cheers
Halden NR7V

56704. Re: TS-830S low output ... solved!

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-13 06:29:17 UTC
From: incorridge@...
Topic: 56664 Message: 56704

Problem solved!
The last words in Terry's post redirected my attention. That and the increased reading on 10m along with slight warming in the dummy load got me to question whether there might not be enough coupling in my wattmeter, even though it seems to work reasonably well on 2m. Duh - it's a VHF-UHF wattmeter! (Workman 104). Opening it up, I find that it's not even a wattmeter; it's just a field strength meter at best - a switch connects the coupling from the TX end of the internal line to the meter.
Now that my measurement instrument has lost credibility, I decided to check whether I could warm up my dummy load on 40m. Yep, gets much warmer than what 1 watt could do.
I should be able to get my hands on my other wattmeter later this week. It also might just be a field strength meter since it's built into an SWR meter - it's a 3-range "Micronta" instrument from Radio Shack I bought in the late 70s (top image in http://www.shadowstorm.com/cb/Vintage-CB-Watt-Meters.html)
I'm already thinking about making one since that's more fun. I need to learn about making a broadband coupler or decide that just a diode will be okay.

Tomorrow I may get a chance to hoist my 20m dipole for the real test.

Yeah, scraping relay contacts isn't such a good idea. I was impatient; the deoxit(tm) I ordered hasn't arrived yet. The relay contacts are actually quite accessible and have plenty of gap to let the xacto(tm) tip in without bending. I just wiped them lightly with the knife and followed with paper soaked in alcohol.
Once I get this radio on the air, I plan to order another antenna relay in case it turns out my scraping went too far. And a spare set of finals.

Thanks, Terry, Lou, Ron for taking the time to comment!

Halden NR7V

56705. Re: TS-830S low output with 6146B cathode resistors failing

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-13 15:52:59 UTC
From: wagstw46@...
Topic: 56664 Message: 56705

Well in this case you didnt have an open and the RF relative power indication you reported was normal. Not being able to personally observe it makes it hard to tell if what you were seeing is normal.

If you buy or make a 3 diode rf probe you can use it next time with your DMM or VTVM and measure the RF voltage across the Dummy ohm resistor. If you have loaded to 100 watts into the nominal 50 ohm dummy load you should read approx 70.7 rms RF volts regardless of what an SWR bridge or a wattmeter is telling you.

Power = E x E / 50 or 71 x 71 / 50 = 5000/50 = 100 watts.

If you have an open in the coax feedline or at the antenna termination point the inline wattmeter should read close to the same 100 watts in Forward and Reverse direction.

If the open is between the output of the Pi-network and the input to the wattmeter you wont see any forward or reflected power on the wattmeter, but will see high Relative Power indication on the Hybrid RF meter position. It will be higher than normal for a given setting of the RF sens pot.

Terry K9TW

---In TS-520_820_530_830@yahoogroups.com, <incorridge@...> wrote :

Thanks, Drew, for commenting on the cathode resistors. With IP way off, that had to be fixed before going further. That's done, and now that I understand what's inside my so-called "wattmeter", I should have this on the air soon. Cheers
Halden NR7V

56706. Re: [TS-520_820_530_830] Re: Wire wrap posts replacements?

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-13 20:14:45 UTC
From: John Davidson
Topic: 56681 Message: 56706

Good fix for circuits carrying AC, DC, or audio signals..... but a wide flat circuit board trace in an RF circuit may be part of a "microstrip", part of a tuned line circuit in VHF and UHF circuits ! If one of those overheats and lifts, a piece of wire would not work there ! My radio is Ham Radio...CW is Real Radio 73, John...K8JD

From: "Joe outwestcw@... [TS-520_820_530_830]" <TS-520_820_530_830@yahoogroups.com>
To: TS-520_820_530_830@yahoogroups.com
Sent: Sunday, March 12, 2017 4:19 PM
Subject: Re: [TS-520_820_530_830] Re: Wire wrap posts replacements?

  Hi, my method might sound a bit brutal...but on my p.a. Board on my ts-530, I found a badly corroded copper trace connected to one of the posts.

The trace had lifted off the board and the original wrapped wire was re-soldered (blobbed) back on (not by me...lol)

I desoldered the blob of solder and de-soldered where it was originally soldered to the corroded trace, and removed the post.
Next I cleaned it (lightly) with 1000 grit (wet and dry) sand paper and contact cleaner.

Then I removed the rotten trace back to where it was healthy...and soldered a new copper wire to it and re wrapped it around the clean post, also I rewrapped the original wire on to the post and they soldered beautifully ☐

Joe

Sent from my iPad

56707. Some bands won't tune

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-13 21:54:06 UTC
From: Joe
Topic: 56707 Message: 56707

Hi, I discovered my radio won't tune up on the following bands

160 ,17, 12 and 10 meters

Could this be a result having dirty wafer switch contacts?

I might add that the radio sat unused for several years...

Thanks for any info...
Joe

56709. Re: [TS-520_820_530_830] Some bands won't tune

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-13 23:27:27 UTC
From: AI4WM Bill
Topic: 56707 Message: 56709

I'm in Florida so the high humidity here affects switch contacts, even in my air conditioned shack. I seldom use 160 and when the rig does not work on 160 I cycle the band switch a few times and then the band will work. I am guessing you may have dirty contacts on the band switch.

I clean mine, after I notice 160 meter band problems, with Caig DeOxit. I use the needle bottle and not the spray that gets all over everything but the contacts.
 73, Bill AI4WM

On Monday, March 13, 2017 6:30 PM, "Joe outwestcw@... [TS-520_820_530_830]" <TS-520_820_530_830@yahoogroups.com> wrote:

  Hi, I discovered my radio won't tune up on the following bands

160 ,17, 12 and 10 meters

Could this be a result having dirty wafer switch contacts?

I might add that the radio sat unused for several years...

Thanks for any info...
Joe

56710. Re: RFE -100 Digital Display for TS520

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-14 13:56:05 UTC
From: k1mic@...
Topic: 56687 Message: 56710

Hello,

Have been looking for a DG-5 unit for my TS520S for over a year. But, I did hear
that they are not very reliable and fragile.
I was lucky to come across a DFD/K Frequency Display and a one owner.
So far so good on the Kenwood 520S. It just plugs into the same connection
as the Remote VFO on the back.
Mike
K1MIC

56711. Re: [TS-520_820_530_830] Some bands won't tune

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-14 00:11:42 UTC
From: Joe
Topic: 56707 Message: 56711

Thanks Bill
I couldn't find deoxit in our local hardware store.. so I bought a spray can of electric contact cleaner and sprayed the contacts and worked the switch back and forth several times.
I did manage to get 28 MHz position to come back to life, but it's intermittent.

Since the radio has been sitting for so long, I'm wondering if I may have to remove the wafer switches and take a closer look?
…see if there were any mechanical faulty contacts??

Joe

56712. Re: [TS-520_820_530_830] Re: Wire wrap posts replacements?

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-14 12:38:14 UTC
From: drew@...
Topic: 56681 Message: 56712

I can guarantee that there will be no microstrip in a Kenwood HF hybrid. Maybe at 450 MHz.

73,
Drew K3PA

---In TS-520_820_530_830@yahoogroups.com, <k8jd@...> wrote :

Good fix for circuits carrying AC, DC, or audio signals.....
but a wide flat circuit board trace in an RF circuit may be part of a "microstrip", part of a tuned line circuit in VHF and UHF circuits ! If one of those overheats and lifts, a piece of wire would not work there !

My radio is Ham Radio...CW is Real Radio 73, John...K8JD

From: "Joe outwestcw@... [TS-520_820_530_830]" <TS-520_820_530_830@yahoogroups.com>
To: TS-520_820_530_830@yahoogroups.com
Sent: Sunday, March 12, 2017 4:19 PM
Subject: Re: [TS-520_820_530_830] Re: Wire wrap posts replacements?

Hi, my method might sound a bit brutal...but on my p.a. Board on my ts-530, I found a badly corroded copper trace connected to one of the posts.

The trace had lifted off the board and the original wrapped wire was re-soldered (blobbed) back on (not by me...lol)

I desoldered the blob of solder and de-soldered where it was originally soldered to the corroded trace, and removed the post.
Next I cleaned it (lightly) with 1000 grit (wet and dry) sand paper and contact cleaner.

Then I removed the rotten trace back to where it was healthy...and soldered a new copper wire to it and re wrapped it around the clean post, also I rewrapped the original wire on to the post and they soldered beautifully ☐

Joe

Sent from my iPad

56713. RE: [TS-520_820_530_830] Some bands won't tune

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-14 15:38:27 UTC
From: Joe
Topic: 56707 Message: 56713

Hi Joe!

I would strongly suggest, that before you dig into the wafers, you go online to Amazon and purchase some DeoxIT from there.

https://www.amazon.com/s/ref=nb_sb_noss_1/156-4512171-8733948?url=search-alias%3Daps <https://www.amazon.com/s/ref=nb_sb_noss_1/156-4512171-8733948?url=search-alias%3Daps&field-keywords=deoxit+d100l> &field-keywords=deoxit+d100l

Use that, sparingly. Get the D100L in the small bottle with the needle applicator, not the spray. Then use a toothpick to apply a **small** drop of the liquid on each contact. Then work the band switch back and forth a few times.

DeoxIT chemically cleans the contacts, where most of your contact cleaners a designed to clean grease and oils, rather than treating the metal itself.

Joe – W7RKN

From: TS-520_820_530_830@yahoogroups.com [mailto:TS-520_820_530_830@yahoogroups.com]
Subject: Re: [TS-520_820_530_830] Some bands won't tune

Thanks Bill

I couldn't find deoxit in our local hardware store.. so I bought a spray can of electric contact cleaner and sprayed the contacts and worked the switch back and forth several times.

I did manage to get 28 MHz position to come back to life, but it's intermittent.

Since the radio has been sitting for so long, I'm wondering if I may have to remove the wafer switches and take a closer look?

…see if there were any mechanical faulty contacts??

Joe

56714. Re: [TS-520_820_530_830] Some bands won't tune

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-14 23:11:30 UTC
From: AI4WM Bill
Topic: 56707 Message: 56714

Contact cleaner is no where close to as good as DeOxit for cleaning switch or other electronic contacts. I say do as previously posted, get some DeOxit on line and get the one with the needle tip.
 73, Bill AI4WM

On Tuesday, March 14, 2017 11:45 AM, "Joe w7rkn.7@... [TS-520_820_530_830]" <TS-520_820_530_830@yahoogroups.com> wrote:

  Hi Joe! I would strongly suggest, that before you dig into the wafers, you go online to Amazon and purchase some DeoxIT from there. https://www.amazon.com/s/ref=nb_sb_noss_1/156-4512171-8733948?url=search-alias%3Daps&field-keywords=deoxit+d100l Use that, sparingly. Get the D100L in the small bottle with the needle applicator, not the spray. Then use a toothpick to apply a **small** drop of the liquid on each contact. Then work the band switch back and forth a few times. DeoxIT chemically cleans the contacts, where most of your contact cleaners a designed to clean grease and oils, rather than treating the metal itself. Joe – W7RKN From: TS-520_820_530_830@...m [mailto:TS-520_820_530_830@yahoogroups.com]
Subject: Re: [TS-520_820_530_830] Some bands won't tune

Thanks Bill I couldn't find deoxit in our local hardware store.. so I bought a spray can of electric contact cleaner and sprayed the contacts and worked the switch back and forth several times.I did manage to get 28 MHz position to come back to life, but it's intermittent. Since the radio has been sitting for so long, I'm wondering if I may have to remove the wafer switches and take a closer look? …see if there were any mechanical faulty contacts??

Joe

56715. Re: [TS-520_820_530_830] Some bands won't tune

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-14 15:58:30 UTC
From: K Campion
Topic: 56707 Message: 56715

Hi Joe,

I was an electrician for many years. I don't think I would use an electrical cleaner from a hardware store on my rig. Some of these are very aggressive and may be bad news on a rig. They can damage plastics and who knows what else. I'd be very concerned that it could damage circuit boards and possibly the very band switch you're working on. As others have said, I would use deoxit.

Hope you get it resolved.

Kevin - N2FLP

56716. Re: [TS-520_820_530_830] Some bands won't tune

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-14 23:59:33 UTC
From: K Campion
Topic: 56707 Message: 56716

I sent this morning, but it never posted. Sorry if it double posts.

Hi Joe,

I was an electrician for many years. I don't think I would use an electrical cleaner from a hardware store on my rig. Some of these are very aggressive and may be bad news on a rig. They can damage plastics and who knows what else. I'd be very concerned that it could damage circuit boards and possibly the very band switch you're working on. As others have said, I would use deoxit.

Hope you get it resolved.

Kevin - N2FLP

56717. Re: RFE -100 Digital Display for TS520

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-15 02:15:08 UTC
From: Wayne Bowyer
Topic: 56687 Message: 56717

I found a near perfect DG-5 about 3 years ago and it has worked flawlessly. Rig is on near every day and often several days at a time. I have been more than satisfied with mine. I'm not aware of any reliability issues but possibly some have had problems. All I can say is I love mine. I compared the 520se/DG5 frequency accuracy with that of my 706MKIIG that was on the desk beside it. It was dead on with my 706.

Wayne
n4eyz

56718. Re: [TS-520_820_530_830] Some bands won't tune

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-14 23:41:25 UTC
From: Joe
Topic: 56707 Message: 56718

Detoxit D100L on order from amazon ☐

while I'm waiting or it to arrive ..I thought I would try once again with the contact cleaner from the hardware store.
I sprayed a little bit and worked the switch back and forth and when I tried to load up on the bands the -send rec switch- started doing the opposite of what you'd expect.

On REC the needle swings hard to the right! .. and on SEND the needle returns to the left (zero)

I'm baffled ☐

Any thoughts or advice?

Thank-you Joe
Ve7LsB

Sent from my iPad

56719. Re: [TS-520_820_530_830] Some bands won't tune

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-15 07:50:42 UTC
From: K Campion
Topic: 56707 Message: 56719

For one, check and make sure your RF gain control is fully clockwise.

Kevin - N2FLP

56720. Re: [TS-520_820_530_830] Some bands won't tune

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-15 04:30:46 UTC
From: Joe Laffey
Topic: 56707 Message: 56720

Hard right on receiver sounds like you might have the RF Gain turned down.

--
Joe
KE0KZI

> On Mar 14, 2017, at 6:41 PM, Joe outwestcw@... [TS-520_820_530_830]
<TS-520_820_530_830@yahoogroups.com> wrote:
>
> Detoxit D100L on order from amazon ☐
>
> while I'm waiting or it to arrive ..I thought I would try once again with the contact cleaner from the hardware store.
> I sprayed a little bit and worked the switch back and forth and when I tried to load up on the bands the -send rec switch- started doing the opposite of what you'd expect.
>
> On REC the needle swings hard to the right! .. and on SEND the needle returns to the left (zero)
>
> I'm baffled ☐
>
> Any thoughts or advice?
>
> Thank-you Joe
> Ve7LsB
>
> Sent from my iPad
>

56721. Re: RFE -100 Digital Display for TS520

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-15 23:09:15 UTC
From: g4vdx@...
Topic: 56687 Message: 56721

Hi
Check out KV6O, he has used Arduino to make a Dg5 emulator.
I made one for my TS520se it works very well.
Joe
g4vdx

56722. MOVs and safety caps

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-16 01:13:08 UTC
From: Joe Laffey
Topic: 56722 Message: 56722

It looks like my Ts-820s has a 125V Metal Oxide Varistor on the mains side of transformer. I didn't see this in the schematic. Is this normal? Seeing as how these wear out I was going to replace it, but 125V seems a little low for modern mains voltages, leading to more frequent triggering and faster failure. 130V or 140V clamping voltage seems more appropriate, no?

Also, it looks like the unit also has line to chassis filter caps. I am guessing, given the age, that these are NOT safety caps (Y rated caps). So I suppose it would be wise to replace these as well, no?

Thanks.
--
Joe
KE0KZI

56723. Re: RFE -100 Digital Display for TS520

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-15 22:33:09 UTC
From: g4vdx@...
Topic: 56687 Message: 56723

Hi
Check out kv6o, I made one for my TS520SE if a Dg5 cannot be found
this a very good alternative.
Joe
g4vdx
www.kv6o.com/wordpress/projects/kenwood-dg5-emulator
http://www.kv6o.com/wordpress/projects/kenwood-dg5-emulator/

.

56724. Re: MOVs and safety caps

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-16 17:01:32 UTC
From: drew@...
Topic: 56722 Message: 56724

Joe,

You haven't said which specific rating of your MOV was 120 V. If it really was 120 V clamping V, it would be destroyed, as the peak voltage (without any transients) of a 120 V RMS line is about 170V. (The RMS V times square root of two, for a sinusoid.) You don't want to suppress every small transient, so the appropriate clamping voltage should be more like perhaps 220 volts. You have to look at all the specs - one number alone does not describe the MOV. There is also the number of Joules it can absorb, which is selected by what else limits the energy in the circuit. Nothing does, except your house's power distribution, in your case.

But I would also note that just adding a MOV across the primary is not a highly effective approach for transients. A MOV works better when it is part of a filter with some series impedance.

Regarding the line to chassis caps, yes, the Y rated caps are preferred. But if your caps are marked 1.4 kV (typical for 120V service), or even 1000 V, they are probably fine.

Most critically, please make sure you have a three wire cord grounded to the chassis. Perhaps a TS820 is new enough to do this from the factory. Some of the older KWs, like the 599 twins, do not.

73,
Drew K3PA

---In TS-520_820_530_830@yahoogroups.com, <joe@...> wrote :

It looks like my Ts-820s has a 125V Metal Oxide Varistor on the mains side of transformer. I didn't see this in the schematic. Is this normal? Seeing as how these wear out I was going to replace it, but 125V seems a little low for modern mains voltages, leading to more frequent triggering and faster failure. 130V or 140V clamping voltage seems more appropriate, no?

Also, it looks like the unit also has line to chassis filter caps. I am guessing, given the age, that these are NOT safety caps (Y rated caps). So I suppose it would be wise to replace these as well, no?

Thanks.
--
Joe
KE0KZI

56725. RE: [TS-520_820_530_830] Re: MOVs and safety caps

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-16 19:05:44 UTC
From: David Boothe
Topic: 56722 Message: 56725

Is it possible this is a thermistor, like the Amphenol CL-80, for current inrush protection?

Common to see these added into restored audio gear (albeit with a lot more tubes than the 820S).

Dave K3DWB

-----Original Message-----
From: TS-520_820_530_830@yahoogroups.com
[mailto:TS-520_820_530_830@yahoogroups.com]
Sent: Thursday, March 16, 2017 1:02 PM
To: TS-520_820_530_830@yahoogroups.com
Subject: [TS-520_820_530_830] Re: MOVs and safety caps

Joe,

You haven't said which specific rating of your MOV was 120 V. If it really was 120 V clamping V, it would be destroyed, as the peak voltage (without any transients) of a 120 V RMS line is about 170V. (The RMS V times square root of two, for a sinusoid.) You don't want to suppress every small transient, so the appropriate clamping voltage should be more like perhaps 220 volts. You have to look at all the specs - one number alone does not describe the MOV. There is also the number of Joules it can absorb, which is selected by what else limits the energy in the circuit. Nothing does, except your house's power distribution, in your case.

But I would also note that just adding a MOV across the primary is not a highly effective approach for transients. A MOV works better when it is part of a filter with some series impedance.

Regarding the line to chassis caps, yes, the Y rated caps are preferred. But if your caps are marked 1.4 kV (typical for 120V service), or even 1000 V, they are probably fine.

Most critically, please make sure you have a three wire cord grounded to the chassis. Perhaps a TS820 is new enough to do this from the factory. Some of the older KWs, like the 599 twins, do not.

73,
Drew K3PA

---In TS-520_820_530_830@yahoogroups.com, <joe@...> wrote :

It looks like my Ts-820s has a 125V Metal Oxide Varistor on the mains side of transformer. I didn't see this in the schematic. Is this normal? Seeing as how these wear out I was going to replace it, but 125V seems a little low for modern mains voltages, leading to more frequent triggering and faster

failure. 130V or 140V clamping voltage seems more appropriate, no?

Also, it looks like the unit also has line to chassis filter caps. I am guessing, given the age, that these are NOT safety caps (Y rated caps). So I suppose it would be wise to replace these as well, no?

Thanks.
--
Joe
KE0KZI

56726. Re: MOVs and safety caps

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-16 21:25:47 UTC
From: wagstw46@...
Topic: 56722 Message: 56726

There are no MOVs on the power transformer primary of a factory TS820 or any KW Hybrid.

There are three disc ceramic AC rated caps. One large diameter 4700pf in shunt and two 470pf (one from each line side to chassis ground). They are noise suppression filters.

Today would be replaced with modern safety caps.

Terry K9TW

56727. Re: [TS-520_820_530_830] Re: MOVs and safety caps

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-16 20:40:08 UTC
From: Joe Laffey
Topic: 56722 Message: 56727

On Thu, 16 Mar 2017, drew@... [TS-520_820_530_830] wrote:

> Joe,
>
> You haven't said which specific rating of your MOV was 120 V. If it
> really was 120 V clamping V, it would be destroyed, as the peak voltage
> (without any transients) of a 120 V RMS line is about 170V. (The RMS V
> times square root of two, for a sinusoid.) You don't want to suppress
> every small transient, so the appropriate clamping voltage should be
> more like perhaps 220 volts. You have to look at all the specs - one
> number alone does not describe the MOV. There is also the number of
> Joules it can absorb, which is selected by what else limits the energy
> in the circuit. Nothing does, except your house's power distribution,
> in your case.

Thanks for the reply.

I guess I will have to look up the part number and find the data sheet. It was marked 125V on it. Most MOVs I find seem to be specified in ACVRMS in their datasheets. I am guessing that was designed for 125V AC RMS

I suppose the mains fuse also limits the energy in the circuit in my case. Does anyone know if this MOV is stock or not?

>
>
> But I would also note that just adding a MOV across the primary is not a
> highly effective approach for transients. A MOV works better when it is
> part of a filter with some series impedance.

So ideally you want more than the impedance presented by the primary coil of the transformer?

>
>
> Regarding the line to chassis caps, yes, the Y rated caps are preferred.
> But if your caps are marked 1.4 kV (typical for 120V service), or even
> 1000 V, they are probably fine.

I shall take a look at these. Might as well replace them, I suppose.

>
>
> Most critically, please make sure you have a three wire cord grounded to
> the chassis. Perhaps a TS820 is new enough to do this from the factory.
> Some of the older KWs, like the 599 twins, do not.

Yeah, my TS-820s does NOT yet have a grounded power cord. I shall add one.
I do have the chassis ground connected to the station ground, which is
connected to the safety ground, but yes, a direct ground attachment form
the power cord would be better.

> 73,
> Drew K3PA
>
>
> ---In TS-520_820_530_830@yahoogroups.com, <joe@...> wrote :
>
> It looks like my Ts-820s has a 125V Metal Oxide Varistor on the mains side of transformer. I didn't see this in the schematic. Is this normal? Seeing as how these wear out I was going to replace it, but 125V seems a little low for modern mains voltages, leading to more frequent triggering and faster failure. 130V or 140V clamping voltage seems more appropriate, no?
>
>
> Also, it looks like the unit also has line to chassis filter caps. I am guessing, given the age, that these are NOT safety caps (Y rated caps). So I suppose it would be wise to replace these as well, no?
>
>
> Thanks.
> --
> Joe
> KE0KZI
>
>
>

--
73
Joe Laffey
KE0KZI

56728. Re: [TS-520_820_530_830] Re: MOVs and safety caps

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-16 23:07:37 UTC
From: Joe Laffey
Topic: 56722 Message: 56728

On Thu, 16 Mar 2017, wagstw46@... [TS-520_820_530_830] wrote:

> There are no MOVs on the power transformer primary of a factory TS820 or any KW Hybrid.
>
> There are three disc ceramic AC rated caps. One large diameter 4700pf in shunt and two 470pf (one from each line side to chassis ground). They are noise suppression filters.
>
>
> Today would be replaced with modern safety caps.
>

Thanks, Terry.

You are correct. I was inside the unit today and took a closer look. It is indeed an across the line capacitor, NOT a MOV.

Thanks again.

--
73
Joe Laffey
KE0KZI

56729. Re: [TS-520_820_530_830] Re: MOVs and safety caps

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-16 22:47:55 UTC
From: drew@...
Topic: 56722 Message: 56729

No, the MOV is not stock.

The mains fuse does not limit transient energy, only integrated "steady state" current. Well, it does have a small limiting effect based on its resistance. Limiting transient energy requires some impedance in series for the transient, for example, a pi section RF filter. Otherwise, the MOV is trying to absorb the full energy of the transient on the mains, limited only by some #12/#14 romex in your wiring, and perhaps the line cord and fuse. This it cannot do, unless it is very large.

A properly designed surge protection power strip (unfortunately, many are not) would be more effective.

73,
Drew K3PA

---In TS-520_820_530_830@yahoogroups.com, <joe@...> wrote :

On Thu, 16 Mar 2017, drew@... mailto:drew@... [TS-520_820_530_830] wrote:

> Joe,
>
> You haven't said which specific rating of your MOV was 120 V. If it
> really was 120 V clamping V, it would be destroyed, as the peak voltage
> (without any transients) of a 120 V RMS line is about 170V. (The RMS V
> times square root of two, for a sinusoid.) You don't want to suppress
> every small transient, so the appropriate clamping voltage should be
> more like perhaps 220 volts. You have to look at all the specs - one
> number alone does not describe the MOV. There is also the number of
> Joules it can absorb, which is selected by what else limits the energy
> in the circuit. Nothing does, except your house's power distribution,
> in your case.

Thanks for the reply.

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>
>
> But I would also note that just adding a MOV across the primary is not a
> highly effective approach for transients. A MOV works better when it is
> part of a filter with some series impedance.

So ideally you want more than the impedance presented by the primary coil
of the transformer?

>
>
> Regarding the line to chassis caps, yes, the Y rated caps are preferred.
> But if your caps are marked 1.4 kV (typical for 120V service), or even
> 1000 V, they are probably fine.

I shall take a look at these. Might as well replace them, I suppose.

>
>
> Most critically, please make sure you have a three wire cord grounded to
> the chassis. Perhaps a TS820 is new enough to do this from the factory.
> Some of the older KWs, like the 599 twins, do not.

Yeah, my TS-820s does NOT yet have a grounded power cord. I shall add one.
I do have the chassis ground connected to the station ground, which is
connected to the safety ground, but yes, a direct ground attachment form
the power cord would be better.

> 73,
> Drew K3PA
>
>
> ---In TS-520_820_530_830@yahoogroups.com mailto:TS-520_820_530_830@yahoogroups.com,
<joe@...> wrote :
>
> It looks like my Ts-820s has a 125V Metal Oxide Varistor on the mains side of
transformer. I didn't see this in the schematic. Is this normal? Seeing as how these wear
out I was going to replace it, but 125V seems a little low for modern mains voltages,
leading to more frequent triggering and faster failure. 130V or 140V clamping voltage seems
more appropriate, no?
>
>
> Also, it looks like the unit also has line to chassis filter caps. I am guessing, given
the age, that these are NOT safety caps (Y rated caps). So I suppose it would be wise to
replace these as well, no?
>
>
> Thanks.
> --
> Joe
> KE0KZI
>
>
>

--
73
Joe Laffey
KE0KZI

56730. Re: [TS-520_820_530_830] Re: MOVs and safety caps

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-17 10:17:54 UTC
From: wagstw46@...
Topic: 56722 Message: 56730

If planning to maintain your TS820S suggest you go to Ken K4EAA website and down load all the nice schematics there. The Main schematic shows these capacitors.

It shows that C11 which you are looking at is a 4700pf. The Service Manual parts lists calls C11 out as a 1 4kWV. Which means it is a 1.4kv working volts DC or WVDC. Common for cap manufacturers that KW used to label disc ceramics in this application as 125vac or 150vac, but they are actually 1.4k wvdc rated caps.

I suspect the physical size may have fooled you?

I have never seen any of these across the line caps fail in any of the Hybrid models, but have seen several of the line to ground ones get leaky and/or outright fail. If leaky can result in higher than normal voltage on the chassis.

They probably see the most severe duty as they are constantly energized with the line cord plugged in. If you are concerned you can replace all three with X and Y safety caps. Just Radios has a nice supply.

Of course I would also always run with a good safety ground connected to rear panel ground lug.

Terry K9TW

56731. Re: [TS-520_820_530_830] Re: MOVs and safety caps

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-17 15:43:00 UTC
From: Joe Laffey
Topic: 56722 Message: 56731

Thanks for the reply, Terry.

Yes, those schematics are great, been using them since I go this TS-820s about three weeks ago. Great resource!

Indeed I was fooled by the size of the across the line capacitor. Even more so I was fooled by seeing 125V on it, which looked like a MOV clamping voltage. Upon closer inspection and flipping the thing over I saw it to be a cap. I already have a supply of X and Y caps. So I will likely replace them next time I am in there.

The caps are indeed on the schematic. A MOV was not... and is not there. Mea culpa.

Thanks again.

--
Joe Laffey
KE0KZI

> On Mar 17, 2017, at 5:17 AM, wagstw46@... [TS-520_820_530_830]
<TS-520_820_530_830@yahoogroups.com> wrote:
>
> If planning to maintain your TS820S suggest you go to Ken K4EAA website and down load all the nice schematics there. The Main schematic shows these capacitors.
>
>
> It shows that C11 which you are looking at is a 4700pf. The Service Manual parts lists calls C11 out as a 1 4kWV. Which means it is a 1.4kv working volts DC or WVDC. Common for cap manufacturers that KW used to label disc ceramics in this application as 125vac or 150vac, but they are actually 1.4k wvdc rated caps.
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> They probably see the most severe duty as they are constantly energized with the line cord plugged in. If you are concerned you can replace all three with X and Y safety caps. Just Radios has a nice supply.
>
> Of course I would also always run with a good safety ground connected to rear panel ground lug.
>
> Terry K9TW
>

56732. Ts-520 hard wiring transformer

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-17 20:53:27 UTC
From: Michael Nolan
Topic: 56732 Message: 56732

Hi
I recently bought a 520 very cheap from a short wave listener.it has no mic or power cord.he said it stopped working he only ever used it as a receiver.

He had it connected via dc,could I hard wire it.we are 220volts here in Ireland.i believe you can connect a cord directly to the transformer,but I'm unsure of how to go about it. any help would be greatly appreciated regards Michael 73

Sent from my iPhone

56733. Re: [TS-520_820_530_830] Re: MOVs and safety caps

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-18 12:51:01 UTC
From: wagstw46@...
Topic: 56722 Message: 56733

OK just wanted to make sure you had the needed documentation. A must if intend to service own radio.

Keep in mind that the Service Manual alignment steps have a significant number of gross errors. Wrong test points, wrong adjustment device, and wrong acceptance criteria. Also in some cases wrong method.
Very difficult for average owner to know when it is wrong. Much of this has been covered here in the past, but may not be easy to search and find.

Still worth having for the X-ray views of the PC boards.

Terry K9TW

56734. Re: Ts-520 hard wiring transformer

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-18 03:41:57 UTC
From: croberts@...
Topic: 56732 Message: 56734

If you have the A/C connector and a schematic you can wire it for 220v.
If you need the schematic I can send it to you, but it can be found on line in many places.

Do you have the A/C connector? And do you have the receptacle to plug in to? Many times people will remove the receptacle and hard wire it because is has a lot of pins. The plug has the ability to power the radio vs 12 or A/C. The 120v/220/v switch would make the difference of whether you can run 220v (or hard wire it).
73
Chuck
N2KWO

56735. TS-830S Gold Resurrection almost done--------BUT!

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-18 16:27:13 UTC
From: allen3500@...
Topic: 56735 Message: 56735

Hi all!
I got this radio in a box of parts. A literal basket case, but all the boards seemed to be there. Fast forward a few years ---------- and this week I decided to finally tackle this project, and NOW----------

I am nearing the completion of bringing this old 830S back from the dead. In the beginning, after installing the circuit boards, almost nothing worked. No VFO output after warmup, no receive, no transmit, no HV, no 9 volts, no 3.6vdc, etc.
I now have it hearing fine, and Transmitting 100+ watts output. Hey! even the old tubes were good!
Everything is ALMOST ready to go. Hence my question!

Problem:
Good RF output on all bands. Carrier Control regulates RF output normally. but does not have any effect on the radio's meter in the IP, or ALC position.
In the IP position, the meter slams to the peg with the mode switch set to ANY position. LSB, USB, CW, or Tune.
In the ALC position, The meter does not slam to the extreme right peg, it simply reads full scale with the mode switch set to ANY position. LSB, USB, CW, or Tune.

When speaking into a mic the mic control causes a rise in RF output, but does not affect the ALC meter indication. The meter continues to read full scale.

It appears to be just a metering issue, and I suspect maybe the meter driver. The thing that has me most puzzled is that the meter indicates normally when set to read Relative RF Output, Comp, or HV.

Maybe I'm just overlooking the obvious.
Any and all help/advice will be appreciated!

Jim wb5twc

56736. Re: [TS-520_820_530_830] Re: MOVs and safety caps

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-18 16:52:20 UTC
From: Joe Laffey
Topic: 56722 Message: 56736

Thanks for the reply, Terry.

Oh fun! Gotta love errors in the manuals.

I have already encountered many of these errors, starting with the carrier level which is supposed to be 500mV, but the manual said 50mV. Luckily there were some helpful people on the QRZ forum that straightened me out. I will see if I can find more info in the archives about these errors.

It's a great radio, and I have been enjoying servicing it. I am almost done with a complete recapping. It has all even going well. Now I am looking for 2.1kHz and a 2.8kHz InRad SSB filters, and I want to wire up the DH switch to toggle between these two. It turned out my CW filter itself was bad, which took a little while to troubleshoot. Since I do not plan on using this rig for CW, that is no problem.

I appreciate the help. Thanks.

--
73
Joe Laffey
KE0KZI

> On Mar 18, 2017, at 7:51 AM, wagstw46@... [TS-520_820_530_830]
<TS-520_820_530_830@yahoogroups.com> wrote:
>
> OK just wanted to make sure you had the needed documentation. A must if intend to service own radio.
>
>
> Keep in mind that the Service Manual alignment steps have a significant number of gross errors. Wrong test points, wrong adjustment device, and wrong acceptance criteria. Also in some cases wrong method.
>
> Very difficult for average owner to know when it is wrong. Much of this has been covered here in the past, but may not be easy to search and find.
>
> Still worth having for the X-ray views of the PC boards.
>
> Terry K9TW
>

56737. Re: [TS-520_820_530_830] Ts-520 hard wiring transformer

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-18 19:44:09 UTC
From: John Davidson
Topic: 56732 Message: 56737

The large "Jones" type power connector has to be wired correctly and the switch on the rear panel has to have 220V selected to run on your power. . My radio is Ham Radio...CW is Real Radio 73, John...K8JD

From: "Michael Nolan tosser20032002@... [TS-520_820_530_830]"
<TS-520_820_530_830@yahoogroups.com>
To: TS-520_820_530_830@yahoogroups.com
Sent: Friday, March 17, 2017 11:13 PM
Subject: [TS-520_820_530_830] Ts-520 hard wiring transformer

  Hi
I recently bought a 520 very cheap from a short wave listener.it has no mic or power cord.he said it stopped working he only ever used it as a receiver.

He had it connected via dc,could I hard wire it.we are 220volts here in Ireland.i believe you can connect a cord directly to the transformer,but I'm unsure of how to go about it. any help would be greatly appreciated regards Michael 73

Sent from my iPhone

56738. Re: [TS-520_820_530_830] Ts-520 hard wiring transformer

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-18 21:06:31 UTC
From: Lou Blasco
Topic: 56732 Message: 56738

Hi Michael,

I imagine many have read you post and cringed a little about you hard wiring. I suggest you go to the K4EAA website http://www.k4eaa.com/ and order a proper power lead. You can also go to the files section of our group and download a manual for your radio. From there you could determine which connections are required.

Regards

Lou
VK3ALB

At 07:53 18/03/2017, you wrote:
>
>
>Hi
>I recently bought a 520 very cheap from a short wave
><http://listener.it/>listener.it has no mic or power cord.he said it
>stopped working he only ever used it as a receiver.
>
>He had it connected via dc,could I hard wire it.we are 220volts here
>in Ireland.i believe you can connect a cord directly to the
>transformer,but I'm unsure of how to go about it. any help would be
>greatly appreciated regards Michael 73
>
>Sent from my iPhone

56739. Re: TS-830S Gold Resurrection almost done--------BUT!

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-19 03:21:51 UTC
From: H Field
Topic: 56735 Message: 56739

Hi Jim,I just brought my 830S back to life after buying it at a swapfest 2 weeks ago. Seller said it worked fine, but it would barely transmit. Its main problem could be similar or related to the problem you're having. In IP mode, the meter uses the cathode resistors (4 x 20 ohms) as their shunt. If the resistance is greater than it should be, the meter will go off the scale without very much IP. I suggest you use an ohmmeter to check the cathode to ground resistance. You can do this from the bottom of the radio, touching terminals on the PC board that contains the octal sockets. It should be 5.0 ohms. If it's something else, just pull all 4 20-ohm resistors and replace them with 1/2 W metal film resistors. For each 20-ohm resistor, I used 2, 10-ohm 1/4 watt resistors in series because that's what I found in my resistors cabinet. I made my first QSOs on the repaired radio today. I hope yours is as easy as this!CheersHalden NR7V ---------- Please don't enter this address at any website or use in email lists. Thanks.

56740. Re: TS-830S Gold Resurrection almost done--------BUT!

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-18 23:19:46 UTC
From: allen3500@...
Topic: 56735 Message: 56740

UPDATE!

I found Q30 defective and replaced it.
I also found a cold solder joint connecting one end of a jumper wire to the IF Board.
Still no joy, but I may be inching closer!

I now have the following:

Good RF output on all bands. Carrier Control regulates RF output normally, but does not have any effect on the radio's meter in the IP, or ALC position.

In the IP position, the meter now appears to work normally in the Tune Position, but continues to slam to the peg with the mode switch set to ANY of the other positions. LSB, USB, or CW.

In the ALC position, The meter no longer reads full scale. I can now adjust it to a starting point via VR6, BUT the ALC indication does not deflect upscale as you speak into the mic.This is true weather in USB or LSB. The RF Output responds beautifully to the mic control while speaking, just no ALC meter indication.

Thanks for help you may be able to render.
Jim wb5twc

56741. HYBRID NET UPDATE (March 19, 2017)

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-19 21:11:46 UTC
From: Mark Gilger
Topic: 56741 Message: 56741

Net Info:
Saturday: 7.235 ☐ 7.233 @ 3:30pm Eastern following the Swan Tech Net
Sunday: 14.316 @ 1800 UTC following the ICOM net

Web Site:
<http://www.wb4hfn.com/KENWOOD/KenwoodHomePage.htm>http://www.wb4hfn.com/KENWOOD/KenwoodHomePage.htm

The net started its existence on November 1st,
2011. The yearly check-in totals are posted at the bottom of this message.

The Saturday net was run by me, WB0IQK. There
were 13 stations checking in under GOOD band conditions.

We had the following number of radios checking in.
4 running TS-520(x)
1 running TS-530(x)
1 running TS-820(x)
2 running TS-830S
0 running TS-510
0 running TS-511
0 running TS-515
0 running 599 twins
0 running TS-900

I was running my TS-830S + Drake L4B amplifier.

The Sunday net was run by me, WB0IQK. There were
14 stations checking in under POOR band conditions.

We had the following number of radios checking in.
2 running TS-520(x)
0 running TS-530(x)
0 running TS-820(x)
4 running TS-830S
0 running TS-510
0 running TS-511
0 running TS-515
0 running 599 twins
0 running TS-900

I was running my TS-830S + Drake L-4B amplifier.

We have been having several people checking in
regularly with their TS-430, TS-440, and
TS-940☐s, which of course is not a hybrid,
although over 30+ years old. Everyone is welcome

as long as they have an interest in the older equipment.

If anyone would be interested in filling in as a
net control station, please send me an email.
Currently it's just myself, Jimmy, WB2KNR, and
Greg, WQ0P, and Rodger, K1HH has agreed to help
with relays . I would like to get several more.
If we do, we can alternate so everyone might be
on a 3-4 week rotation. It's a lot of fun and a
good way to make sure you station is optimized.

For anyone that has not heard, we have a new web
site that WB4HFN is hosting. He currently has a
very nice site for Drake, Collins and Heathkit
and now Kenwood Hybrids. Good quality manuals
plus sale flyers and brochures will be found
here, along with user supplied information for all Hybrids.

His URL is:
<http://www.wb4hfn.com/KENWOOD/KenwoodHomePage.htm>http://www.wb4hfn.com/KENWOOD/KenwoodHo
mePage.htm

To date, we have had the following check-in:

Nov. 2011 ☐ Oct. 2012 Saturday total 754
check-ins, Sunday total 563 check-ins
Nov. 2012 - Oct. 2013 Saturdays total 828 check-ins, Sunday total 609 check-ins
Nov. 2013 - Oct. 2014 Saturdays total 842 check-ins, Sunday total 744 check-ins
Nov. 2014 ☐ Oct 2015 Saturdays total 962 check-ins, Sunday total 669 check-ins
Nov. 2015 ☐ Oct 2016 Saturdays total 807 check-ins, Sunday total 628 check-ins

November 2016, Saturday net total = 80, Sunday total = 68
December 2016, Saturday net total = 73, Sunday total = 69
January 2017, Saturday net total = 50, Sunday total = 90
February 2017, Saturday net total = 85, Sunday total = 66
March 2017, Saturday net total = 35, Sunday total = 37 (Month to date)

Net Info:
Saturday: 7.235 @ 3:30 Eastern following the Swan Tech Net
Sunday: 14.316 @ 1800 UTC following the ICOM net

Web Site:
<http://www.wb4hfn.com/KENWOOD/KenwoodHomePage.htm>http://www.wb4hfn.com/KENWOOD/KenwoodHo
mePage.htm

73's,
Mark, WB0IQK

56742. Re: [TS-520_820_530_830] TS-830S Gold Resurre ction almost done--------BUT!

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-18 20:40:30 UTC
From: gary brewer
Topic: 56735 Message: 56742

You have a bios you need to turn diwn to 60ma then it has to be in ip on freq. Flip the snd button up 1 sec drop it down 60ma after that go to the rf volts in back and turn it counter clock wise the once you do turn urmt 2/3 way .k5geb
--
Sent from Gmail Email App for Android Saturday, 18 March 2017, 00:27PM -04:00 from allen3500@bellsouth.net [TS-520_820_530_830] TS-520_820_530_830@yahoogroups.com :

>
>Hi all!
>I got this radio in a box of parts. A literal basket case, but all the boards seemed to be there. Fast forward a few years ---------- and this week I decided to finally tackle this project, and NOW----------
>
>I am nearing the completion of bringing this old 830S back from the dead. In the beginning, after installing the circuit boards, almost nothing worked. No VFO output after warmup, no receive, no transmit, no HV, no 9 volts, no 3.6vdc, etc.
>I now have it hearing fine, and Transmitting 100+ watts output. Hey! even the old tubes were good!
>Everything is ALMOST ready to go. Hence my question!
>
>Problem:
>Good RF output on all bands. Carrier Control regulates RF output normally. but does not have any effect on the radio's meter in the IP, or ALC position.
>In the IP position, the meter slams to the peg with the mode switch set to ANY position. LSB, USB, CW, or Tune.
>In the ALC position, The meter does not slam to the extreme right peg, it simply reads full scale with the mode switch set to ANY position. LSB, USB, CW, or Tune.
>
>When speaking into a mic the mic control causes a rise in RF output, but does not affect the ALC meter indication. The meter continues to read full scale.
>
>It appears to be just a metering issue, and I suspect maybe the meter driver. The thing that has me most puzzled is that the meter indicates normally when set to read Relative RF Output, Comp, or HV.
>
>Maybe I'm just overlooking the obvious.
>Any and all help/advice will be appreciated!
>
>Jim wb5twc
>
>
>
>

56743. Re[2]: TS-830S Gold Resurrection almost done- -------BUT!

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-19 15:56:36 UTC
From: gary brewer
Topic: 56735 Message: 56743

Hello k5geb here on the ip of the ts 830s s the ip has to be turned down to 60mA after that you should go to the rf and see where the needle is rember the ip has to be 60mA IF IT MORE then 60mA the needle will be oof scale
--
Sent from Gmail Email App for Android Saturday, 18 March 2017, 07:19PM -04:00 from allen3500@bellsouth.net [TS-520_820_530_830] TS-520_820_530_830@yahoogroups.com :

>
>UPDATE!
>
>I found Q30 defective and replaced it.
>I also found a cold solder joint connecting one end of a jumper wire to the IF Board.
>Still no joy, but I may be inching closer!
>
>I now have the following:
>
> Good RF output on all bands. Carrier Control regulates RF output normally, but does not have any effect on the radio's meter in the IP, or ALC position.
>
>In the IP position, the meter now appears to work normally in the Tune Position, but continues to slam to the peg with the mode switch set to ANY of the other positions. LSB, USB, or CW.
>
>In the ALC position, The meter no longer reads full scale. I can now adjust it to a starting point via VR6, BUT the ALC indication does not deflect upscale as you speak into the mic. This is true weather in USB or LSB. The RF Output responds beautifully to the mic control while speaking, just no ALC meter indication.
>
>Thanks for help you may be able to render.
>Jim wb5twc
>
>

56744. Re: [TS-520_820_530_830] Ts-520 hard wiring transformer

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-21 02:57:44 UTC
From: w5rkl@...
Topic: 56732 Message: 56744

I have a video on my website that shows how to wire the 12 pin power connector.

I compare the original Japanese 12 pin power connector verses the 12 pin power connector available on eBay and other sources. The pin numbers/labels are backwards on the original Japanese power connector when compared to the 12 pin power connector available today and I show that in the video.

http://w5rkl.com/wp-content/uploads/2015/02/Kenwood-12-pin-power-connector-wiring.wmv
http://w5rkl.com/wp-content/uploads/2015/02/Kenwood-12-pin-power-connector-wiring.wmv

The TS-520 and TS-520S both have 120VAC/240VAC AC main power options.

The TS-520, first of the 3 TS-520 models, came with the DC power option.
The TS-520S, second of the 3 TS-520 models, the DC power option was "optional"
The TS-520SE, third and last of the TS-520 models, had 120VAC/240VAC AC power ONLY, no DC power option at all.

73
Mike W5RKL
www.w5rkl.com http://www.w5rkl.com

56745. Plate cap removal

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-20 21:08:14 UTC
From: Joe
Topic: 56745 Message: 56745

Hello, I have a question.
When my deoxit arrives, I have been advised to apply it sparingly with a toothpick to each contact. Most of the contacts look accessible except the two or three wafers that are behind the final tubes.
I was wondering if I should remove the variable plate capacitor to be able to get better access to the wafer switches?
If that is a good idea, any advice on how to remove it?

Thank you in advance
Joe

56746. Re: TS-830S Gold Resurrection almost done--------BUT!

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-20 19:20:22 UTC
From: allen3500@...
Topic: 56735 Message: 56746

Thanks for the advice guys! I now have the meter reading in the IP position. Meter shunt had gone high.
All I lack now is getting ALC indication on the meter.
Radio has full 100+ watts output. When speaking into the mic it has good RF output and the MIC control varies the the mic input, I just don't have any ALC reading on the meter!

Oh well, the quest continues.

Jim wb5twc

56747. Re[2]: [TS-520_820_530_830] Ts-520 hard wirin g transformer

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-21 03:02:14 UTC
From: gary brewer
Topic: 56732 Message: 56747

I have a question i have a nomic rigblaster and they gave me the wireing diegram but i can not get the radio to key up useing the rigblaster any help would be greatful i have the ts830s kenwood radio. De k5geb
--
Sent from Gmail Email App for Android Monday, 20 March 2017, 10:57PM -04:00 from w5rkl@yahoo.com [TS-520_820_530_830] TS-520_820_530_830@yahoogroups.com :

>
>I have a video on my website that shows how to wire the 12 pin power connector.
>
>I compare the original Japanese 12 pin power connector verses the 12 pin power connector
>available on eBay and other sources. The pin numbers/labels are backwards on the original
>Japanese power connector when compared to the 12 pin power connector available today and
>I show that in the video.
>
>http://w5rkl.com/wp-content/uploads/2015/02/Kenwood-12-pin-power-connector-wiring.wmv
>
>The TS-520 and TS-520S both have 120VAC/240VAC AC main power options.
>
>The TS-520, first of the 3 TS-520 models, came with the DC power option.
>The TS-520S, second of the 3 TS-520 models, the DC power option was "optional"
>The TS-520SE, third and last of the TS-520 models, had 120VAC/240VAC AC power ONLY,
>no DC power option at all.
>
>73
>Mike W5RKL
>www.w5rkl.com
>

56748. Wanted: RF unit / board for 530 or 830 or coil pack tuning antenna / RF coils

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-22 11:37:00 UTC
From: kb8tl@...
Topic: 56748 Message: 56748

Need several of the transformers that were totally buggered by a previous owner / butcher of a TS-830 I acquired. I was going to use the radio for parts but it is functional (after quite a bit of work) except for some cracked and demolished tuning cores. Specifically, the RF and Antenna transformers for 80 are wrecked, several others have cracked but movable cores. Or if you have a complete RF board, send me a price
email or text / phone to 734-218- one five zero five
thanks!
Bob
KB8TL

56749. Re: Re[2]: [TS-520_820_530_830] Ts-520 hard wirin g transformer

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-22 12:55:37 UTC
From: w5rkl@...
Topic: 56732 Message: 56749

Gary,

You might have better results with your question by creating a new message thread.

73
Mike W5RKL
www.w5rkl.com http://www.w5rkl.com

56750. Re: Wanted: RF unit / board for 530 or 830 or coil pack tuning antenna / RF coils

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-22 17:44:49 UTC
From: bobcolenso@...
Topic: 56748 Message: 56750

There is one on eBay right now (1341) for $100.00 I was thinking about buying it, fixing the bandswitch and clean and lube everything, and either flip it or keep it for parts. Like this.

Good Luck
Bob-KD8WU

56751. Drive shaft nylon gear repair

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-23 15:44:46 UTC
From: wayne.bowyer@...
Topic: 56751 Message: 56751

Like most on these old radios the nylon gears on my 830 are cracked. Seems I remember seeing something about replacements but I'm curious if anyone has ever tried repairing them using epoxy or something similar? I have many types of epoxy and adhesives laying around and am thinking of trying maybe JB Weld (tiny amount of course). Has anyone tried this?

Thanks

Wayne
n4eyz

56752. Re: Drive shaft nylon gear repair

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-23 16:14:54 UTC
From: croberts@...
Topic: 56751 Message: 56752

I haven't tried it. Most glue just won't stick to it.
But
http://nr6c.com/sprocket.htm http://nr6c.com/sprocket.htm
work wonderfully.

Chuck
N2KWO

56753. Re: Wanted: RF unit / board for 530 or 830 or coil pack tuning antenna / RF coils

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-23 17:17:13 UTC
From: w0nta@...
Topic: 56748 Message: 56753

Bob,

You can remove the coils from the board and reverse the slugs. They have adjusting slots on both ends. If that won't work, let me know and I will call you later.

73, Dick, W0NTA

56754. Re: [TS-520_820_530_830] Re: Drive shaft nylon gear repair

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-23 17:47:04 UTC
From: Joseph Stiles
Topic: 56751 Message: 56754

Wayne,
  Won't work. As Chuck-n2kwo indicated, go to the address he listed.I have purchased several sets...they are PERFECT replacements. He does them on a 3-D printer.
 73
Joe wb7uqu

On Thursday, March 23, 2017 9:27 AM, "croberts@... [TS-520_820_530_830]" <TS-520_820_530_830@yahoogroups.com> wrote:

  I haven't tried it. Most glue just won't stick to it.
But
http://nr6c.com/sprocket.htm
work wonderfully.

Chuck
N2KWO

56755. Re: Wanted: RF unit / board for 530 or 830 or coil pack tuning antenna / RF coils

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-23 21:17:09 UTC
From: I.E.G.
Topic: 56748 Message: 56755

Couple of things that may not seem so obvious about damaged core removal .

Removal of the coils from the board is the best (only) way

Unscrewing from the bottom is the only way

Lighter fluid and a little heat makes it easier

You may have to push back and forth with a straight pin on top and the screw driver from the bottom to get the core to move .

Threads on the cores are fairly common , just use a thread gauge from a tap and die set or match it up with a screw . Use the screw to straighten out the threads, not another core .

The recovered form may be loose , just use beeswax rather than anything more permanent. Use sparingly to begin with and don't heap a bunch on top of the core when finished. It just causes issues later.

The cores are reasonably common but that is a search for another time

AF7XT Dennis

--

56756. Re: [TS-520_820_530_830] Re: Drive shaft nylon gear repair

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-23 23:53:29 UTC
From: David Boothe
Topic: 56751 Message: 56756

Ditto on the NR6C cogs. Work great.
Dave K3DWB

Sent from my iPad

On Mar 23, 2017, at 12:14 PM, "croberts@... [TS-520_820_530_830]" <TS-520_820_530_830@yahoogroups.com> wrote:

> I haven't tried it. Most glue just won't stick to it.
> But
> http://nr6c.com/sprocket.htm
> work wonderfully.
>
> Chuck
> N2KWO
>
>

56757. Re: Drive shaft nylon gear repair

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-24 02:04:33 UTC
From: zehrhj@...
Topic: 56751 Message: 56757

I've repaired cracked ones by using a small hose clamp. It worked well. 73 Howard K4LXY

56758. Re: [TS-520_820_530_830] Drive shaft nylon gear repair

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-24 11:17:05 UTC
From: Mike McHugh
Topic: 56751 Message: 56758

Hi Wayne..... I'll throw in my two cents worth.... (On the plastic gear repair).....
I used just plain old plastic tie wraps....You can crank those down very tight and they do great job.... Had my gears strengthened for years now..... No problems ....Get tie wraps that are sized right or they will catch on the chain but otherwiseGood to go...

Mike (KD2DYY)

From: "wayne.bowyer@... [TS-520_820_530_830]" <TS-520_820_530_830@yahoogroups.com>
To: TS-520_820_530_830@yahoogroups.com
Sent: Thursday, March 23, 2017 11:44 AM
Subject: [TS-520_820_530_830] Drive shaft nylon gear repair

Like most on these old radios the nylon gears on my 830 are cracked. Seems I remember seeing something about replacements but I'm curious if anyone has ever tried repairing them using epoxy or something similar? I have many types of epoxy and adhesives laying around and am thinking of trying maybe JB Weld (tiny amount of course). Has anyone tried this?

Thanks

Wayne
n4eyz

56759. Re: Drive shaft nylon gear repair

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-24 10:24:16 UTC
From: bobcolenso@...
Topic: 56751 Message: 56759

I've read about (haven't tried it) using a good ty-rap. I like the hose clamp idea.

Bob
KD8WU

56760. Wanted crystal 820s

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-24 14:52:00 UTC
From: cwebs@...
Topic: 56760 Message: 56760

Where can I get a Fix crystal for 14,070 for use with my TS-820s for PSK31 use. Is there any company still making them? Or does anyone have one for sale? Thanks.

Carl
AB1ZI

56761. RE: [TS-520_820_530_830] Re: Drive shaft nylon gear repair

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-24 15:00:25 UTC
From: bowerg0325
Topic: 56751 Message: 56761

Hi. Long time.. 520 still working. Drive a bit stiff still.but can use it. Great idea with the clamps for the shaft. Let's schedule some time. 73..Georhe WD4HBC
-------- Original message --------From: "zehrhj@aol.com [TS-520_820_530_830]" <TS-520_820_530_830@yahoogroups.com> Date: 3/23/17 10:04 PM (GMT-05:00) To: TS-520_820_530_830@yahoogroups.com Subject: [TS-520_820_530_830] Re: Drive shaft nylon gear repair

I've repaired cracked ones by using a small hose clamp. It worked well.73 Howard K4LXY

56762. Re: Drive shaft nylon gear repair

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-24 18:16:29 UTC
From: Mark Gilger
Topic: 56751 Message: 56762

The article on using Tie Wrap and super glue to repair these is listed here:

http://www.wb4hfn.com/KENWOOD/Articles/024%20Technical%20Exchange.pdf

73's,
Mark, WB0IQIK

56763. Re: Drive shaft nylon gear repair

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-24 21:07:15 UTC
From: bob royston
Topic: 56751 Message: 56763

Don't know if I would use metal hose clamps.. I think that would throw off something in the rf section.. Really don't know.. n4vnl/Bob

Bob Royston

56764. Re: [TS-520_820_530_830] Re: Drive shaft nylon gear repair

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-24 23:55:42 UTC
From: Lou Everett, Sr.
Topic: 56751 Message: 56764

The clamps would be to hold the gear together as the glue or weld dried thoroughly. Then we would remove the clamp and use the gear as normal.

Lou Everett, Sr., WA5LOU

On Fri, Mar 24, 2017 at 5:07 PM, bob royston n4vnl1@... [TS-520_820_530_830] <TS-520_820_530_830@yahoogroups.com> wrote:

>
>
> Don't know if I would use metal hose clamps.. I think that would throw off
> something in the rf section.. Really don't know.. n4vnl/Bob
>
> Bob Royston
>
>

56765. Re: [TS-520_820_530_830] Re: Drive shaft nylon gear repair

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-25 05:55:09 UTC
From: I.E.G.
Topic: 56751 Message: 56765

http://nr6c.com/TEMPO%20SPROCKETS.htm

I have a set of these gears in my Tempo 2020. Delivery was nearly sudden even with the print to order . Quality was so good I had to remove minor burrs on the shafts to install . The radio was unusable without the sprocket replacement and and a joy once fixed. I expect to be back for the Hybrid set for my TS-830S . Glue? Clamps? Tie Wraps? Forget it , just buy the gears you won't be disappointed. This is a rare case of close your eyes, sign the check, and be happy.
I can supply pics on request . This really is an unsolicited review of an excellent product and service .

AF7XT Dennis

On Fri, Mar 24, 2017 at 4:55 PM, 'Lou Everett, Sr.' loueverettsr@... [TS-520_820_530_830] <TS-520_820_530_830@yahoogroups.com> wrote:

>
>
> The clamps would be to hold the gear together as the glue or weld dried
> thoroughly. Then we would remove the clamp and use the gear as normal.
>
> Lou Everett, Sr., WA5LOU
>
>
> On Fri, Mar 24, 2017 at 5:07 PM, bob royston n4vnl1@...
> [TS-520_820_530_830] <TS-520_820_530_830@yahoogroups.com> wrote:
>
>>
>>
>> Don't know if I would use metal hose clamps.. I think that would throw
>> off something in the rf section.. Really don't know.. n4vnl/Bob
>>
>> Bob Royston
>>
>
>
>

--
one of these days I will have an internet connection faster than my computer

56766. TS-830s carrier oscillator/alignment results--- question

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-25 16:10:02 UTC
From: zelasko54@...
Topic: 56766 Message: 56766

Hello to all,

When following the factory carrier oscillator alignment procedures, I find that if I set the LSB and USB trimmers to specified frequencies, LSB audio received is far too tinny and USB is too bassy.

If I align the same, carefully using the web published internal 25 Khz marker process, I get a pretty good balance between high/lows but then when checking the freq. counter, both frequencies are about 280-290 Hz above the factory spec as follows:

LSB factory = 8828.50, actual 8828.79 (+ 279 Hz)
USB factory = 8831.50, actual 8831.78 (+ 278 Hz)

Is it possible that the filter has shifted nearly 300Hz?

Should I align to obtain the factory 8828.50/8831.50 Khz points and then align the VBT? Will proper VBT alignment 'correct' the issue? I notice that this step follows the carrier oscillator alignment in the alignment sequence/order.

Or.....should I stick with the results from the 25 KHz alignment (audio sounds good, somewhat equal 'hiss' when switching LSB/USB, ignoring the freq. counter readouts? Is 'equal 'hiss' a viable verification after 'correct alignment?

Sorry about the numerous questions but if I can get through this part, I can complete the VBT alignment and get this fine rig on the air....

Thanks very much in advance.

Emil
ka8gef

56767. Re: Wanted: RF unit / board for 530 or 830 or coil pack tuning antenna / RF coils

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-25 17:01:47 UTC
From: kb8tl@...
Topic: 56748 Message: 56767

Thanks Dennis, I removed the coils from the board and extracted the cores from the bottom. They were only damaged on the top little bit. I flipped them around and it worked like a charm. All back together and don't need to buy an RF board. Bob
KB8TL

56768. Re: Wanted: RF unit / board for 530 or 830 or coil pack tuning antenna / RF coils

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-25 17:02:31 UTC
From: kb8tl@...
Topic: 56748 Message: 56768

And Thanks to Dick too! Bob

56769. Re: [TS-520_820_530_830] TS-830s carrier oscillator/alignment results---question

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-25 18:02:06 UTC
From: Jan Servaites
Topic: 56766 Message: 56769

I'll have to review the 830 alignment procedures, but here's what I do.
What I use is my TS940 and tune to the frequencies, and then_listen to a
particular carrier_ that I'm adjusting.
Then I set my signal generator to the exact carrier freq and have it
radiate near the 830 and then beat the two carriers in the 940 receiver,
and listen while I turn the carrier trimmers until it matches the SG.
In that way, the carrier osc isn't loaded down by connecting my freq
counter or anything else.
Jan N8CBX

On 3/25/2017 12:10 PM, zelasko54@... [TS-520_820_530_830] wrote:
>
> When following the factory carrier oscillator alignment procedures, I
> find that if I set the LSB and USB trimmers to specified frequencies,
> LSB audio received is far too tinny and USB is too bassy.
> If I align the same, carefully using the web published internal 25 Khz
> marker process, I get a pretty good balance between high/lows but
> then when checking the freq. counter, both frequencies are about
> 280-290 Hz above the factory spec as follows:
>

This email has been checked for viruses by Avast antivirus software.
https://www.avast.com/antivirus

56770. Re: TS-830s carrier oscillator/alignment results--- question

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-25 19:52:08 UTC
From: wagstw46@...
Topic: 56766 Message: 56770

You can never bring the IF filters to the Carrier Oscillators. You cannot rely on the IF Filter FC to be precisely to spec after all these years.

Always bring the carrier oscillators to the xtal IF filter. Setting the Carrier Oscillators with a frequency counter to the crystal frequencies and trying to get them precisely adjusted to that frequency is a waste of time. It is simply a starting point. After doing that all the service manual will then direct you to adjust what they call the Carrier Set Point or the SSB Frequency Response.

Setting the Carrier Oscillators has an element of personal preference to it. Some like a more bass response and others prefer a more treble presence. I am on the latter camp as I run barefoot and I am interested in SSB communications and breaking those DX pileups and not 50KW clear channel AM audio quality.

Lots of ways to bring the Carrier Oscillators to the IF filters after you rough set them to the listed frequencies in the Service Manual with your Frequency Counter (your counter should not pull the oscillators if you use 10x scope probe).

1. Best method is to follow the method in the Service Manual if you have a very good stable and accurate AF generator or Arbitrary waveform generator. Need accurate frequency and stable millivolt output that does not change level when you change frequency. Inject low level audio into the mic jack as directed and adjust the trimmer caps for 6dB roll off at 300hz on inline wattmeter. Do this at 50 watts into dummy load as it take some key down time and no need for long keydown time at 100 watts output. Can spend a lot of time going back and forth from 300hz to 2600 hz to get equal roll off, but I just adjust trimmer for approx 12.5 watts at 300hz.

2. If no decent audio gen then can use the 25khz Marker and S-meter and zero beat method. Need to set AGC to fast and have delicate touch on VFO knob. Works fairly well.

3. Can use Audio Spectrum analyzer software (like Spectrogram) and laptop sound card driven from head phone jack. Best to inject noise into SO-239 with diode noise bridge, but absent that can just find a clear frequency. Remember that Rx frequency response wont precisely match Tx frequency response as in Rx the bulk of what you will see is the contribution of the xtal IF filter and a little from the LP filter at output of the Product Detector and a little from the audio response of the Audio amp.

4. Can turn on the Moni and simply adjust LSB and USB carrier oscillator trimmer caps listening to your own voice in the headphones.

Not uncommon for people to write me or call me to explain they cant get the Carrier Oscillator trimmers set to read the exact frequency noted in the Service Manual and they have spent inordinate amount of time messing with it and I always ask them ....Why? It is simply a starting point to get you in the ball park. Of course this assumes you dont have bad IF filter or bad trimmer cap which is fortunately not too common. Also, no reason to spend inordinate amount of time trying to get precisely same frequency response in LSB and USB. Lastly, the ceramic trimmer caps are susceptable to change in capacitance with bumping

the rig or moving rig around on the bench and you may have to tweak from time to time. This is considered a user adjustment. That is why access holes are provided in the bottom covers.

Terry K9TW

56771. New file uploaded to TS-520_820_530_830

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-25 20:49:30 UTC
From: TS-520_820_530_830@yahoogroups.com
Topic: 557 Message: 56771

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the TS-520_820_530_830
group.

File : /Robert KA4VNK TS830S LSB.jpg
Uploaded by : wagstw46 <wagstw46@...>
Description : TS830 LSB Freq Response Set Spectrogram

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/TS-520_820_530_830/files/Robert%20KA4VNK%20TS830S%20LSB.jpg

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

wagstw46 <wagstw46@...>

56772. New file uploaded to TS-520_820_530_830

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-25 20:50:21 UTC
From: TS-520_820_530_830@yahoogroups.com
Topic: 557 Message: 56772

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the TS-520_820_530_830
group.

File : /Robert KA4VNK TS830S USB.jpg
Uploaded by : wagstw46 <wagstw46@...>
Description : TS830S USB Freq Response Spectrogram

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/TS-520_820_530_830/files/Robert%20KA4VNK%20TS830S%20USB.jpg

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

wagstw46 <wagstw46@...>

56773. Spectrogram Plots

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-25 21:00:24 UTC
From: wagstw46@...
Topic: 56773 Message: 56773

Just loaded two Spectrogram audio spectrum analyzer software plots of the as-left SSB frequency response of a TS830S to the Files section. These were taken after using the mic line audio injection/wattmeter 6dB roll off method to bring the carrier oscillators to the IF filter. The markers are at 300hz and 2400hz.

These are run using a free version of Spectrogram and a patch cord from rig headphone jack to the mic input on my laptop. Use a audio taper pot in small bud box in the patch cord to set the level so I dont overdrive the sound card.

If unable to use the mic line audio injection method can use Spectrogram or one of several similar audio spectrum analyzer software packages available to set the LSB and USB carrier oscillators. If you dont have a noise bridge can just find a clear frequency.

Can also see some examples of the the TS830S CW narrow filter and CW wide filter under the Photo tab on my website www k9tw dot com.

Terry K9TW

56774. Re: [TS-520_820_530_830] Re: Drive shaft nylon gear repair

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-25 22:06:59 UTC
From: Osamu Hazawa
Topic: 56751 Message: 56774

Hi all,

I know a source for a complete replacement (color is black instead of white).
I used it for my TS-830 and it woked without a problem.
The company is in Japan:
http://umezawa-sendai.shop-pro.jp/?pid=5384756
If you have someone living in Japan, this is an option.

Hope this helps,

Osamu

----- Original Message -----
From: 'Lou Everett, Sr.' loueverettsr@gmail.com [TS-520_820_530_830]
To: TS-520_820_530_830@yahoogroups.com
Sent: Saturday, March 25, 2017 8:55 AM
Subject: Re: [TS-520_820_530_830] Re: Drive shaft nylon gear repair

The clamps would be to hold the gear together as the glue or weld dried thoroughly. Then we would remove the clamp and use the gear as normal.

Lou Everett, Sr., WA5LOU

On Fri, Mar 24, 2017 at 5:07 PM, bob royston n4vnl1@... [TS-520_820_530_830] <TS-520_820_530_830@yahoogroups.com> wrote:

Don't know if I would use metal hose clamps.. I think that would throw off something in the rf section.. Really don't know.. n4vnl/Bob

Bob Royston

56775. Re: [TS-520_820_530_830] Re: Drive shaft nylon gear repair

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-25 22:36:20 UTC
From: croberts@...
Topic: 56751 Message: 56775

Osamu,

From the photo that is the flexible coupler, not the gear. And is is available hear in the US. Some had posted the link to the company and I bought a few of them about 2 weeks ago.

Thanks for who ever put up the link! That is hard to find item, even though a standard coupler will work, the flexible one helps if things are not perfectly in line. And great for restoration minded people.

Chuck
N2KWO

56776. Re: [TS-520_820_530_830] Re: Drive shaft nylon gear repair

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-26 05:48:40 UTC
From: Osamu Hazawa
Topic: 56751 Message: 56776

Chuck and all,

Sorry! I made a mistake!
I actually don't have a source for the nylon gear but I got some used ones from TS-520.
I have seen gears and couplers having a crack.
Is there any magic to prevent them from deterioration?

Osamu

----- Original Message -----
From: croberts@sagamorewoods.com [TS-520_820_530_830]
To: TS-520_820_530_830@yahoogroups.com
Sent: Sunday, March 26, 2017 7:36 AM
Subject: Re: [TS-520_820_530_830] Re: Drive shaft nylon gear repair

Osamu,

From the photo that is the flexible coupler, not the gear. And is is available hear in the US. Some had posted the link to the company and I bought a few of them about 2 weeks ago.

Thanks for who ever put up the link! That is hard to find item, even though a standard coupler will work, the flexible one helps if things are not perfectly in line. And great for restoration minded people.

Chuck
N2KWO

56777. FS: Ts-820 fan

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-26 08:02:32 UTC
From: Bill Houghton
Topic: 56777 Message: 56777

Hi all,
I'm cleaning out the shack and came across a fan for a TS-820. This came in a batch of ham items I got about four years ago. It was in a plastic bag with a piece of paper that said "TS-820 fan". I believe this same fan is also used on the TS-530. From my online research this does appear to be a TS-820 fan. I connect it to a variac set to 100V and it works fine, Pics on request. $23 shipped, PayPal or USPS money order.. If no interest here then its off to feebay. 73 -Bill, Wa6NEQ

56778. Re: [TS-520_820_530_830] Re: Drive shaft nylon gear repair

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-26 15:46:45 UTC
From: croberts@...
Topic: 56751 Message: 56778

Osamu,
No worries! No reason to say sorry.

As far and preventing determination, they were produced decades ago. I don't know of a way to prevent it but the ones the you can buy now (link at bottom of thread) are a good product.

Chuck
N2KWO

56779. Hybrid Net Update (March 26, 2017)

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-26 19:12:52 UTC
From: Mark Gilger
Topic: 56779 Message: 56779

Net Info:
Saturday: 7.235 ☐ 7.233 @ 3:30pm Eastern following the Swan Tech Net
Sunday: 14.316 @ 1800 UTC following the ICOM net

Web Site:
<http://www.wb4hfn.com/KENWOOD/KenwoodHomePage.htm>http://www.wb4hfn.com/KENWOOD/KenwoodHomePage.htm

The net started its existence on November 1st,
2011. The yearly check-in totals are posted at the bottom of this message.

The Saturday net was run by me, WB0IQK. There
were 18 stations checking in under GOOD band conditions.

We had the following number of radios checking in.
2 running TS-520(x)
1 running TS-530(x)
1 running TS-820(x)
6 running TS-830S
1 running TS-510
0 running TS-511
0 running TS-515
0 running 599 twins
0 running TS-900

I was running my TS-830S + Drake L4B amplifier.

The Sunday net was run by me, WB0IQK. There were
7 stations checking in under POOR band
conditions. There was a DX contest running that was causing a lot of QRM.

We had the following number of radios checking in.
2 running TS-520(x)
0 running TS-530(x)
0 running TS-820(x)
3 running TS-830S
0 running TS-510
0 running TS-511
0 running TS-515
0 running 599 twins
1 running TS-900

I was running my TS-830S + Drake L-4B amplifier.

We have been having several people checking in
regularly with their TS-430, TS-440, and
TS-940☐s, which of course is not a hybrid,

although over 30+ years old. Everyone is welcome
as long as they have an interest in the older equipment.

If anyone would be interested in filling in as a
net control station, please send me an email.
Currently it's just myself, Jimmy, WB2KNR, and
Greg, WQ0P, and Rodger, K1HH has agreed to help
with relays . I would like to get several more.
If we do, we can alternate so everyone might be
on a 3-4 week rotation. It's a lot of fun and a
good way to make sure you station is optimized.

For anyone that has not heard, we have a new web
site that WB4HFN is hosting. He currently has a
very nice site for Drake, Collins and Heathkit
and now Kenwood Hybrids. Good quality manuals
plus sale flyers and brochures will be found
here, along with user supplied information for all Hybrids.

His URL is:
<http://www.wb4hfn.com/KENWOOD/KenwoodHomePage.htm>http://www.wb4hfn.com/KENWOOD/KenwoodHo
mePage.htm

To date, we have had the following check-in:

Nov. 2011 ☐ Oct. 2012 Saturday total 754
check-ins, Sunday total 563 check-ins
Nov. 2012 - Oct. 2013 Saturdays total 828 check-ins, Sunday total 609 check-ins
Nov. 2013 - Oct. 2014 Saturdays total 842 check-ins, Sunday total 744 check-ins
Nov. 2014 ☐ Oct 2015 Saturdays total 962 check-ins, Sunday total 669 check-ins
Nov. 2015 ☐ Oct 2016 Saturdays total 807 check-ins, Sunday total 628 check-ins

November 2016, Saturday net total = 80, Sunday total = 68
December 2016, Saturday net total = 73, Sunday total = 69
January 2017, Saturday net total = 50, Sunday total = 90
February 2017, Saturday net total = 85, Sunday total = 66
March 2017, Saturday net total = 53, Sunday total = 47 (Month to date)

Net Info:
Saturday: 7.235 @ 3:30 Eastern following the Swan Tech Net
Sunday: 14.316 @ 1800 UTC following the ICOM net

Web Site:
<http://www.wb4hfn.com/KENWOOD/KenwoodHomePage.htm>http://www.wb4hfn.com/KENWOOD/KenwoodHo
mePage.htm

73's,
Mark, WB0IQK

56780. Something Bizzarre on the IF board

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-26 18:11:39 UTC
From: Joe
Topic: 56780 Message: 56780

Hello, today well I was working on replacing some capacitors on the IF board I noticed something strange.

It appears that someone along the line has made some cuts on the board through the traces. Here is a link to the picture. https://www.flickr.com/gp/153165435@N04/0mj38p

I can only assume that someone was modifying the board, the cuts look very deliberate. I would say if they were cut using a Dremel.

I was wondering if anybody has ever seen something like this, or would you,recommend that I bridged these back to the original way they were.

Thank you for any help!

Joe

56781. Need complete set of TS-830S knobs

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-26 20:47:53 UTC
From: kb8tl@...
Topic: 56781 Message: 56781

If you are parting out a radio, I need all the knobs plus the tuning knob and its spring.
thanks
Bob
KB8TL

56782. For sale 830s and VFO

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-26 21:35:47 UTC
From: yioutta_99@...
Topic: 56782 Message: 56782

I recently came into a Kenwood 830s, external VFO and Station Monitor. I just don't have the room. So I am selling off the 830 and the VFO for starters. It does not have the interconnect cable on the VFO, the radio will need a power cable and the VFO pins will need to be shorted or plug used. I used the mic, power cord, and plug from my 520s to check the radio out. Good news is I was able to tune up and make a few contacts. The radio is putting about 70 watts according to my meter. Tuning for the dip was a bit broad compared to my 520s. The send switch paddle is missing, but I was able to used the switch with the tip of my finger. I can not speak for the VFO since I do not have a cable.
I have both units in a large box that weights 48 pounds, measures 22X22X22 inches. Shipping from my QTH (WA) to my old QTH (NJ) is $115 your milage will vary.

I am asking $500 dollars for both plus the actual shipping cost.

I have plenty of photos please PM me if you are interested.

Steve
N7LWF

56783. Re: [TS-520_820_530_830] Need complete set of TS-830S knobs

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-26 23:24:55 UTC
From: fpath fpath
Topic: 56781 Message: 56783

Bob,

If your looking for parts try
Walter.dilley at Gmail.com

He has most of what you need

73s
Dave
Vk5pdl
Sent from my HTC

"kb8tl@arrl.net [TS-520_820_530_830]" <TS-520_820_530_830@yahoogroups.com> wrote:

If you are parting out a radio, I need all the knobs plus the tuning knob and its spring.

thanks

Bob

KB8TL

Posted by: kb8tl@arrl.net

Reply via web post<https://groups.yahoo.com/neo/groups/TS-520_820_530_830/conversations/messages/56781;_ylc=X3oDMTJxZWZocmg1BF9TAzk3MzU5NzE0BGdycElkAzc1MjUwMjEEZ3Jwc3BJZAMxNzA1MDYzMTA4BG1zZ0lkAzU2NzgxBHNlYwNmdHIEc2xrA3JwbHkEc3RpbWUDMTQ5MDU2MTI3NA--?act=reply&messageNum=56781> • Reply to sender <mailto:kb8tl@arrl.net?subject=Re%3A%20Need%20complete%20set%20of%20TS-830S%20knobs> • Reply to group <mailto:TS-520_820_530_830@yahoogroups.com?subject=Re%3A%20Need%20complete%20set%20of%20TS-830S%20knobs> • Start a New Topic<https://groups.yahoo.com/neo/groups/TS-520_820_530_830/conversations/newtopic;_ylc=X3oDMTJlMzB2c3NlBF9TAzk3MzU5NzE0BGdycElkAzc1MjUwMjEEZ3Jwc3BJZAMxNzA1MDYzMTA4BHNlYwNmdHIEc2xrA250cGMEc3RpbWUDMTQ5MDU2MTI3NA--> • Messages in this topic<https://groups.yahoo.com/neo/groups/TS-520_820_530_830/conversations/topics/56781;_ylc=X3oDMTM2ZzFia2xsBF9TAzk3MzU5NzE0BGdycElkAzc1MjUwMjEEZ3Jwc3BJZAMxNzA1MDYzMTA4BG1zZ0lkAzU2NzgxBHNlYwNmdHIEc2xrA3Z0cGMEc3RpbWUDMTQ5MDU2MTI3NAR0cGNJZAM1Njc4MQ--> (1)

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56784. No Drive

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-27 01:49:08 UTC
From: jbarnard@...
Topic: 36959 Message: 56784

Recently, I purchased a TS803s that receives great but puts out no drive output to finals in the transmit positions. In the transmit positions, I can set the correct bias but that is all. Even with carrier control fully advanced, there no indication on the ALC meter then the drive control is tuned. The drive control will peak the received signal just fine.

I would appreciate any ideas of where start looking. BTW, the 12BY7 driver tube is good. Please email any suggestions at w4brx61"at" gmail.com. Thanks for any and all help.

73, Jim W4BRX

56785. Re: [TS-520_820_530_830] No Drive

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-27 02:45:04 UTC
From: fpath fpath
Topic: 36959 Message: 56785

Jim

Check the SG switch on rear panel.
Checkv the 4 x 20 ohm resistors on final board these fail. These are the most common issues. F no joy there report back and we can proceed.
Remember to unplug and discharge HV system before opening final cage.

73s
Dave
Vk5pdl
Sent from my HTC

"jbarnard@ftc-i.net [TS-520_820_530_830]" <TS-520_820_530_830@yahoogroups.com> wrote:

Recently, I purchased a TS803s that receives great but puts out no drive output to finals in the transmit positions. In the transmit positions, I can set the correct bias but that is all. Even with carrier control fully advanced, there no indication on the ALC meter then the drive control is tuned. The drive control will peak the received signal just fine.

I would appreciate any ideas of where start looking. BTW, the 12BY7 driver tube is good. Please email any suggestions at w4brx61"at" gmail.com. Thanks for any and all help.

73, Jim W4BRX

56786. Re: [TS-520_820_530_830] Need complete set of TS-830S knobs

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-27 03:32:33 UTC
From: Walter Dilley
Topic: 56781 Message: 56786

Thanks Dave. Yes, it's true, I have virtually all of the parts we need to keep our hybrids going.

So, Bob, let me know off-list what you need. Thanks.

walter.dilley@...

On Sun, Mar 26, 2017 at 4:24 PM, fpath fpath fpath@... [TS-520_820_530_830] <TS-520_820_530_830@yahoogroups.com> wrote:

>
>
> Bob,
>
> If your looking for parts try
> Walter.dilley at Gmail.com
>
> He has most of what you need
>
> 73s
> Dave
> Vk5pdl
> Sent from my HTC
>
> "kb8tl@... [TS-520_820_530_830]" <TS-520_820_530_830@yahoogroups.com>
> wrote:
>
>
>
> If you are parting out a radio, I need all the knobs plus the tuning knob
> and its spring.
>
> thanks
>
> Bob
>
> KB8TL
>
>
> ------------------------------
> Posted by: kb8tl@...
> ------------------------------
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> • Reply to sender
> <kb8tl@...?subject=Re%3A%20Need%20complete%20set%20of%20TS-830S%20knobs>
> • Reply to group
> <TS-520_820_530_830@yahoogroups.com?subject=Re%3A%20Need%20complete%20set%20of%20TS-830S
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56787. Re: [TS-520_820_530_830] No Drive

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-27 13:19:30 UTC
From: wagstw46@...
Topic: 36959 Message: 56787

Dave:

No requirement to have SG switch on to have RF drive. Common test for the Driver stage is to test in CW mode with the SG switch off.

However, do need cathode emission from the Final tubes so your advice to check the cathode resistors is good. Easy to measure resistance at the cathode tube socket solder lug on the Final board to see if have approx 5.0 ohms.

For ALC indication when peaking the Drive control need the following:
1. Good Driver tube
2. Heaters turned on
3. CAR level pot advanced
4. Switch from cutoff bias to operating bias voltage level at Final tube control grids when flip to send (approx -60vdc).
5. Sufficient RF drive voltage level at Final tube control grids to overcome the dc bias offset level to cause the control grids to become positive with respect to the cathode (greater than 42rms rf volts). This results in microampere grid current flow which turns on ALC amp transistor and bucks the ALC buss voltage and reduces the servo/control voltage to the TIF amp and drives the ALC meter indication up scale.
6. Good ALC amp circuit and metering circuit.

When simple common problems exhausted time to reach for RF voltage measuring test gear and run the TX Level Diagram to see where losing the RF drive or where it is low. Can then focus troubleshooting efforts at that point.

Terry K9TW

56788. Re: [TS-520_820_530_830] No Drive

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-27 13:33:02 UTC
From: wagstw46@...
Topic: 36959 Message: 56788

I forgot to mention that dont need the cathode resistors to measure at 5 ohms.

Just need to make sure not in meg ohm values or infinite (open). If can set the zero signal or idling plate current to 60ma then you know the cathode resistors are not open.

Must have cathode emission, but dont need precise cathode meter shunt values to produce ALC indication when peaking the Drive control.

Terry K9TW

56789. Re: [TS-520_820_530_830] No Drive

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-27 13:50:13 UTC
From: w5rkl@...
Topic: 36959 Message: 56789

Jim said:

" can set the correct bias but that is all."

The normal operating position of the rear panel SG switch is "ON".
The SG switch, when set to OFF, applies a "negative" DC voltage to the final tube screens in transmit. When this occurs, the screen are negative in respects to the plate, blocking any current flowing to the plate, hence no IP meter indication in any TX mode. Setting the SG switch to "ON", applies a "Positive" DC voltage to the final tube screens allowing current to flow to the plate in TX modes, hence normal IP meter indications. Since Jim can adjust the bias pot for a normal 60ma idling current in TX then I do not suspect the SG switch is the source of the problem.

As for the final tube cathode resistors being the source of the problem, again if the cathode resistors were burnt open then there would be no current, IP or grid (ALC) flowing in the final tubes. The cathodes of the final tubes is the "common current return path" for all currents, excluding the filament current, flowing in the final tubes. Therefore, if the cathode resistors were open then there would be no grid current (ALC) nor would there be any IP current indications on the meter in TX modes.

Jim did not say which Mode he has lost ALC in so I'm going to assume he loss ALC in "TUNE mode. I suggestion Jim check R15 and R16, both are 56K 1/2 watt reach. If either resistor has gone high in resistance then replace both resistors with new 56K 1/2 watt resistors and check for normal ALC in TUNE mode.

The TS-830 can also be tuned up in CW mode. If Jim can tune the 830 up in CW mode then R15 and R16 are more than likely the source of the problem.

73
Mike W5RKL
www.w5rkl.com http://www.w5rkl.com

56790. Re: No Drive

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-27 12:08:48 UTC
From: matran40@...
Topic: 36959 Message: 56790

I have a somewhat similar problem. On my 830s, sometimes I can tune up and transmit just fine. Then, all of the sudden (for instance, when I change bands and go to retune on the new band) the drive drops off to nothing. No response at all. At first, I thought it was a problem with the carrier pot because if I worked the pot back and forth, I could get the drive to respond. Then this method stopped working. Then I noticed that when I worked the drive knob, I was getting wild swings in the meter response with very little movement of the knob. But working the drive knob didn't always allow me to get a response either. It's definitely an intermittent problem. I cleaned all the pots, switches and air capacitors. I will check those resistors you mentioned, but would welcome any other ideas you might have.

73,
Matt
AB1YY

56791. Re: [TS-520_820_530_830] No Drive

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-27 20:00:34 UTC
From: wagstw46@...
Topic: 36959 Message: 56791

Jim said he had no RF drive (ALC indication) and could not peak the ALC.

The Screen grid 56k divider resistors have nothing to do with low or no RF drive and no ALC indication.

Can cut them out and toss over your shoulder and still have good RF drive to peak in Tune or CW mode. Final tube Screen grid voltage not required for ALC indication in Tune mode. All you need the Finals for is Cathode emission.

You may be confusing RF output power and RF drive? If the screen grid dividers are very high or open then you will of course have no RF output in Tune mode and wont be able to tune the tank to resonance. You will of course have RF output in CW mode and can quickly tune the tank to resonance and load the radio.

I strongly recommend that the testing and troubleshooting of loss of RF drive be done with the SG switch in the OFF position. In my world that is the "Normal" position and represents good maintenance practice especially for newer folks. This eliminates any concern regards needlessly stressing the Final tubes with long key down times or keying the Finals with the tank not tuned to resonance. No need for any Final tube plate current for RF drive and peaking the ALC indication.

Still need to limit the key down time and rest between Driver stage testing on multiple bands as the Driver tube is running Class A at close to 25ma which is near max plate dissipation.

Terry K9TW

56792. Re: No Drive

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-27 20:55:44 UTC
From: wagstw46@...
Topic: 36959 Message: 56792

If it is doing this on all bands then couple of things come to mind:

1. Bad solder connection at the Driver tube socket solder lugs.Try gently pushing and pulling on the Driver tube shield (use glove or wrag to avoid hot shield can). If this is problem will have to pull the RF board.

2. May have bad contact on RL-1 Aux Control Relay on the Audio Board. Monitor the operating bias voltage on Driver tube control grid Pin 2 (DRB).

3. Could have bad Molex Connector 6 at Audio Board. Try gently wiggling the connector and/or gently tugging and pushing on the DRB lead wire.

4. Could have bad solder connection at VC-2 or VC-3 air variable cap frame solder lugs. Can get a hold of VC-3 shaft bearing stanchion or pedestal and gently rock it back and forth. If this is the problem have to pull the RF board.

If doing it only on a couple of the bands then likely bad/dirty bandswitch contacts on RF board. Clean with artist brush. Try DeOxit D5 and if no go then try full strength D100L. Not easy to apply on bottom of the arc. Usually have to apply to the wiper and transfer to the bottom contacts.

Terry K9TW

---In TS-520_820_530_830@yahoogroups.com, <matran40@...> wrote :

I have a somewhat similar problem. On my 830s, sometimes I can tune up and transmit just fine. Then, all of the sudden (for instance, when I change bands and go to retune on the new band) the drive drops off to nothing. No response at all. At first, I thought it was a problem with the carrier pot because if I worked the pot back and forth, I could get the drive to respond. Then this method stopped working. Then I noticed that when I worked the drive knob, I was getting wild swings in the meter response with very little movement of the knob. But working the drive knob didn't always allow me to get a response either. It's definitely an intermittent problem. I cleaned all the pots, switches and air capacitors. I will check those resistors you mentioned, but would welcome any other ideas you might have.

73,
Matt
AB1YY

56793. Re: [TS-520_820_530_830] No Drive

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-27 21:09:13 UTC
From: w5rkl@...
Topic: 36959 Message: 56793

Yep my mistake. I was thinking IP meter indication instead of ALC meter indication. R15 and R16, if resistance increased significantly will, in TUNE mode, affect cathode current (IP) but not ALC current.

Sorry about that Jim.

73
Mike W5RKL
www.w5rkl.com http://www.w5rkl.com

56794. Re: [TS-520_820_530_830] Re: Drive shaft nylon gear repair

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-27 19:31:07 UTC
From: jenni_last@...
Topic: 56751 Message: 56794

For what it's worth, I drilled holes in a set of stainless steel hose clamps to line-up with the coupler screws . The clamps were installed and tightened, then the locking screws on the coupler were tightened. The clamps prevented the cracks from spreading under pressure, and the screws have a good bite on the shafts. The clamps are still in there, and there has been no discernible effect. (Other than everything works!)

Cheers!

Jennifer - KF5HCD

56795. Re: [TS-520_820_530_830] No Drive

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-27 21:57:21 UTC
From: Joe Laffey
Topic: 36959 Message: 56795

I had a recent drive issue in my TS-820s. I ended up tracking it backwards with a scope and found that the CW filter itself was defective.

Adjusting the wiring harness to the IF board to configure it as though there was no CW filter (it was an option, and this is describe in the owner's manual) fixed everything for SSB use.

My drive n CW and TUN mode would take 30-60mins to warm up to nearly full power on the lower bands. I plan on removing and directing the CW filter. My plan is to install two SSB filters of different widths and use the DH switch to change between them.

--
Joe Laffey
KE0KZI

> On Mar 27, 2017, at 4:09 PM, w5rkl@... [TS-520_820_530_830]
<TS-520_820_530_830@yahoogroups.com> wrote:
>
> Yep my mistake. I was thinking IP meter indication instead of ALC meter
> indication. R15 and R16, if resistance increased significantly will, in TUNE mode,
> affect cathode current (IP) but not ALC current.
>
> Sorry about that Jim.
>
> 73
> Mike W5RKL
> www.w5rkl.com
>
>

56796. Re: [TS-520_820_530_830] No Drive

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-27 22:19:25 UTC
From: wagstw46@...
Topic: 36959 Message: 56796

Easy mistake to make.

If he had adjusted zero signal plate current in SSB mode as is the proper method and then moved meter selector switch to TUNE and peaked the Drive and then moved meter switch to Ip and flipped to Send to tune tank to resonance (dip Ip) and found that he had no Ip indication on the meter the first place to look would have been the Screen grid dividers resistors. Common problem as these old rigs age. Of course always should replace both resistors.

Before checking the resistors as you noted it is OK to place mode switch in CW and attempt to tune the tank to resonance (dip the plate current). Has to be done relatively quickly as plate current can initially be pretty high with full 250vdc screen grid voltage available. Can also load in CW mode until can obtain replacement resistors. Just have to make that initial plate current dip relatively quickly and best to preset the Plate Tune cap close to the white band indication on the arc.

Terry K9TW

56797. Re: [TS-520_820_530_830] Re: Drive shaft nylon gear repair

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-27 22:49:10 UTC
From: wagstw46@...
Topic: 56751 Message: 56797

I have seen several fabricated copper tubing and aluminum tubing sleeves with a lite press fit with two holes for the allen head set screws. This is a bit more elaborate than ty-wraps or plastic teeth racheting pipe clamps cinched up around the nylon body of the sprockets. Of course these have to ride on the allen head screws.

As you note the small amount of metal introduced by a sleeve will not de-tune the grid or plate circuits or effect the alignment of the coil pack. Already have metal drive shaft and metal ladder chains in close proximity to air variable caps VC-1, VC-2, and VC-3.

These kind of repairs are in the true spirit of ham radio when a part is no longer available. Hams are known for ingenuity. However, some hams are quite frugal if not downright cheap (money for smokes, booze, golf etc). We all spend our discretionary money in different ways.

The sprockets that Gregory Graham makes have more meat on them, are not made of nylon, and have brass insert hubs that are tapped for the allen head set/grub screws. Makes a nice professional repair. Most of my customers opt for the new sprockets.

One thing that could be considered is replacing the upper drive sprockets with Gregory's new production units and applying tywraps to the larger capacitor shaft sprockets to avoid having to pull the RF board. I suggest if planning on keeping the rig might want to buy a set of the bottom sprockets and put them back for time when the cracked ones start to slip and get the air variable caps plate mesh out of sync.

Terry K9TW

56798. Re: [TS-520_820_530_830] No Drive

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-28 01:24:23 UTC
From: Jan Servaites
Topic: 36959 Message: 56798

Joe,
I can't remember exactly how the filters are switched on the 820, but most of them use diodes to do the switching between SSB & CW filters. I never seen a filter that opened up. That's a new one for me.
I think they are 1N60 germanium, it wouldn't hurt just to do a quick check on them.
Jan N8CBX

On 3/27/2017 5:57 PM, Joe Laffey joe@... [TS-520_820_530_830] wrote:
> I had a recent drive issue in my TS-820s. I ended up tracking it
> backwards with a scope and found that the CW filter itself was defective.
>

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56799. Re: [TS-520_820_530_830] No Drive

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-28 02:03:06 UTC
From: Joe Laffey
Topic: 36959 Message: 56799

Yes, they are diode switched. I checked out every other component, including the diodes, and checked the DC signaling path. The failure is definitely inside the CW filter can.

When I take it apart I will see about doing a YouTube video of it for anyone interested. If I can easily fix it I will, but I am not yet fluent in CW. So I am eager to get dual SSB filters anyway.
--
Joe Laffey
KE0KZI

> On Mar 27, 2017, at 8:24 PM, Jan Servaites jservaites@... [TS-520_820_530_830] <TS-520_820_530_830@yahoogroups.com> wrote:
>
> Joe,
> I can't remember exactly how the filters are switched on the 820, but most of them use diodes to do the switching between SSB & CW filters. I never seen a filter that opened up. That's a new one for me.
> I think they are 1N60 germanium, it wouldn't hurt just to do a quick check on them.
> Jan N8CBX
>
>> On 3/27/2017 5:57 PM, Joe Laffey joe@... [TS-520_820_530_830] wrote:
>>
>> I had a recent drive issue in my TS-820s. I ended up tracking it backwards with a scope and found that the CW filter itself was defective.
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56800. Re: [TS-520_820_530_830] No Drive

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-28 03:31:15 UTC
From: Jan Servaites
Topic: 36959 Message: 56800

Amazing.
Yes, a video would be great to see the insides.
Jan N8CBX

On 3/27/2017 10:03 PM, Joe Laffey joe@... [TS-520_820_530_830]
wrote:
> Yes, they are diode switched. I checked out every other component,
> including the diodes, and checked the DC signaling path. The failure
> is definitely inside the CW filter can.
>
> When I take it apart I will see about doing a YouTube video of it for
> anyone interested. If I can easily fix it I will, but I am not yet
> fluent in CW. So I am eager to get dual SSB filters anyway.
> --
> Joe Laffey
> KE0KZI
>

56801. Re: [TS-520_820_530_830] Re: No Drive

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-27 21:03:25 UTC
From: fpath fpath
Topic: 36959 Message: 56801

Matt
The hint here is when changing bands. Have a look at the nylon coupler on the band switch s22. It may not be indenting properly thus the wafer switches on rf board not do aligning properly or could be that grime may have built but on wafer switches.

73s
Dave
Vk5pdl
Sent from my HTC

"matran40@... [TS-520_820_530_830]" <TS-520_820_530_830@yahoogroups.com> wrote:

I have a somewhat similar problem. On my 830s, sometimes I can tune up and transmit just fine. Then, all of the sudden (for instance, when I change bands and go to retune on the new band) the drive drops off to nothing. No response at all. At first, I thought it was a problem with the carrier pot because if I worked the pot back and forth, I could get the drive to respond. Then this method stopped working. Then I noticed that when I worked the drive knob, I was getting wild swings in the meter response with very little movement of the knob. But working the drive knob didn't always allow me to get a response either. It's definitely an intermittent problem. I cleaned all the pots, switches and air capacitors. I will check those resistors you mentioned, but would welcome any other ideas you might have.

73,
Matt
AB1YY

56802. Re: [TS-520_820_530_830] No Drive

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-27 21:06:02 UTC
From: fpath fpath
Topic: 36959 Message: 56802

Terry
I mis-read though no output. Was heading onto flight.

73s
Dave
Vk5pdl
Sent from my HTC

"wagstw46@... [TS-520_820_530_830]" <TS-520_820_530_830@yahoogroups.com> wrote:

Jim said he had no RF drive (ALC indication) and could not peak the ALC.

The Screen grid 56k divider resistors have nothing to do with low or no RF drive and no ALC indication.

Can cut them out and toss over your shoulder and still have good RF drive to peak in Tune or CW mode. Final tube Screen grid voltage not required for ALC indication in Tune mode. All you need the Finals for is Cathode emission.

You may be confusing RF output power and RF drive? If the screen grid dividers are very high or open then you will of course have no RF output in Tune mode and wont be able to tune the tank to resonance. You will of course have RF output in CW mode and can quickly tune the tank to resonance and load the radio.

I strongly recommend that the testing and troubleshooting of loss of RF drive be done with the SG switch in the OFF position. In my world that is the "Normal" position and represents good maintenance practice especially for newer folks. This eliminates any concern regards needlessly stressing the Final tubes with long key down times or keying the Finals with the tank not tuned to resonance. No need for any Final tube plate current for RF drive and peaking the ALC indication.

Still need to limit the key down time and rest between Driver stage testing on multiple bands as the Driver tube is running Class A at close to 25ma which is near max plate dissipation.

Terry K9TW

56803. Anodized chassis on early 830, they should have had the gold label.

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-28 10:48:50 UTC
From: kb8tl@...
Topic: 56803 Message: 56803

I picked up two 830s locally, one a parts donor (so called gold label), and the second, a low 1 million serial number. The older parts donor has a nice anodized chassis (like all the back panels are), and a stout shield in between the power transformer and the I.F. board. The newer "gold" 2 million serial has no shield and a zinc plated chassis. I've managed to get them both up and running thanks to tips from this newsgroup.

Looks to me like Kenwood's bean counters thrifted out the 830 and stuck a gold label on it. A Madison avenue move it would appear.
Bob
KB8TL

56804. Re: [TS-520_820_530_830] Re: Drive shaft nylon gear repair

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-28 11:51:12 UTC
From: George Bower
Topic: 56751 Message: 56804

I have a TS520S and the drive shaft is quite stiff. I have tried to spray it with Deoxit with no success. Any suggestions for limbering up this knob/shaft?

George WD4HBC

Sent from IPad

56805. Parting out TS-530S

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-28 03:19:41 UTC
From: kd6hul@...
Topic: 56805 Message: 56805

I recently acquired a TS-530S as part of a package deal with a nice 520S that I'm currently restoring. The 530S has been dropped or hit somehow, causing pretty severe frame damage. The electronic bits are still functioning, with good receive and good power output to a dummy load. The shrouds and front bezel are also in good, repairable shape. To fix the tweaked frame will require more work than I am interested in doing, and frankly, I am more interested in the 520S anyway. I've decided to part the radio out. If you are interested in purchasing something, please contact me at jgreenly -at- Yahoo -dot- com or at KD6HUL-at-Gmail-dot-com with "530S parts" in the subject line. Thanks for the bandwidth...

Jeff KD6HUL

56806. Re: [TS-520_820_530_830] No Drive

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-28 12:03:46 UTC
From: kf4rrn@...
Topic: 36959 Message: 56806

My TS-530 is having sort of the similar problem except that R11 on the rectifier board keeps burning up. According to the manual this is a 470 ohm 1 watt metal film resistor. I've changed it and checked associated components and can't find anything wrong. My next step was to put an ammeter online and see much current is being drawn by the cicuit.

Carlos KF4RRN

56807. Re: Anodized chassis on early 830, they should have had the gold label.

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-29 02:39:15 UTC
From: rrmvargo@...
Topic: 56803 Message: 56807

I've noticed the same thing, Bob. So, for my Gold, I removed the transformer shield from the 1M SN unit & made a cardboard copy. From the copy I made a sheet metal copy & installed it on the 2M Gold. Can't say I noticed a difference, but I know it is there. Heck, it could even cause a problem. Maybe it wasn't removed for cost. -73 Bob W8RMV

56808. Bandswitch ball bearing unit ..

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-29 01:34:25 UTC
From: Joe
Topic: 56808 Message: 56808

Hello, I have a question.
On the bandswitch there is a "unit" (don't know the name of it) ...that has a few ball bearings in it.
It's located next to the final tubes.
Sorry that I don't know the name if it, but I'm sure you guys will know what it's called.

Anyway my question is, is there a special lubricant that is supposed to be applied to the ball bearing device?

Thanks for any info

Joe Ve7lsb

56809. Re: [TS-520_820_530_830] Bandswitch ball bearing unit ..

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-29 08:34:09 UTC
From: fpath fpath
Topic: 56808 Message: 56809

Joe
If your talking 30 series, it is s22, band switch. I use an artist brush and put a little deoxit. Check the nylon coupler as they tend yo crack.

73s
Dave
Vk5pdl
Sent from my HTC

"Joe outwestcw@... [TS-520_820_530_830]" <TS-520_820_530_830@yahoogroups.com> wrote:

Hello, I have a question.
On the bandswitch there is a "unit" (don't know the name of it) ...that has a few ball bearings in it.
It's located next to the final tubes.
Sorry that I don't know the name if it, but I'm sure you guys will know what it's called.

Anyway my question is, is there a special lubricant that is supposed to be applied to the ball bearing device?

Thanks for any info

Joe Ve7lsb

56810. RF board drive chains/ TS-830s

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-30 01:14:59 UTC
From: wayne.bowyer@...
Topic: 56810 Message: 56810

I'm slowly getting my 830 back together. Should have been completed weeks ago but many other distractions going on. Concerning the 3 air variable capacitors and associated chains/sprockets. Got all 3 chains back in place and everything I thought aligned. However the middle capacitor is slightly lagging behind the rest. Very slightly but I know they must be aligned together. Is this an adjustment in the spring link? This part has been a bit challenging. It almost seems like the chain is one link too long. Sadly I don't remember if the 3 were perfectly aligned prior. I'm kinda guessing possibly not as the board had been out at least once before I got it. Or is just simply I've done something wrong?

Wayne
n4eyz

56811. Re: [TS-520_820_530_830] Bandswitch ball bearing unit ..

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-30 01:53:13 UTC
From: croberts@...
Topic: 56808 Message: 56811

I've noticed that a l lot of people refer to "Deoxit". But it think it might worth making a note that the dexoit that you need is NOT that can spray (Deoxit D5 aerosol can).

The Deoxit for lubricating the bearings is the needle dropper.

Here is a link to the manufacturer and you can see there are lot of products called "deoxit".

http://store.caig.com/s.nl/sc.2/category.188/.f
http://store.caig.com/s.nl/sc.2/category.188/.f

Chuck
N2KWO

56812. Re: [TS-520_820_530_830] RF board drive chains/ TS-830s

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-30 03:05:25 UTC
From: fpath fpath
Topic: 56810 Message: 56812

Wayne
The way I have done before is turn till all air caps are closed. I then loosen the grub screw on top and bottom sprocket. Then fully close the air cap, tighten grub screw and you should now be fully aligned.

73s
Dave
Vk5pdl
Sent from my HTC

"wayne.bowyer@... [TS-520_820_530_830]" <TS-520_820_530_830@yahoogroups.com> wrote:

I'm slowly getting my 830 back together. Should have been completed weeks ago but many other distractions going on. Concerning the 3 air variable capacitors and associated chains/sprockets. Got all 3 chains back in place and everything I thought aligned. However the middle capacitor is slightly lagging behind the rest. Very slightly but I know they must be aligned together. Is this an adjustment in the spring link? This part has been a bit challenging. It almost seems like the chain is one link too long. Sadly I don't remember if the 3 were perfectly aligned prior. I'm kinda guessing possibly not as the board had been out at least once before I got it. Or is just simply I've done something wrong?

Wayne
n4eyz

56813. Re: [TS-520_820_530_830] RF board drive chains/ TS-830s

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-30 15:33:12 UTC
From: wayne.bowyer@...
Topic: 56810 Message: 56813

Sounds simple........I feel a bit like a dummy. My chain on the center cap had slack on one side and tight on the other. I've been over thinking my problem. I believe all along I was off one tooth when laying the chain back in place. They were all aligned when at rest.......start to turn and the center would lag behind because of slack just a tad. Chain was off one link. Thanks!

Wayne
n4eyz

56814. Power Cable Needed

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-30 14:37:33 UTC
From: jstoneback@...
Topic: 56814 Message: 56814

Greetings,

I am in need of the power cable for the TS-511S / PS-511S combo. Anyone have one laying around? I'd really like to put this fine rig on the air.

73,

Jim K4AXF
TS-530SP
TS-520

56815. Re: [TS-520_820_530_830] Power Cable Needed

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-30 20:25:06 UTC
From: Jim Lamanteer
Topic: 56814 Message: 56815

JIM
CHECK YOUR E-MAIL.... JIMMY

From: "jstoneback@... [TS-520_820_530_830]" <TS-520_820_530_830@yahoogroups.com>
To: TS-520_820_530_830@yahoogroups.com
Sent: Thursday, March 30, 2017 1:21 PM
Subject: [TS-520_820_530_830] Power Cable Needed

Greetings,
I am in need of the power cable for the TS-511S / PS-511S combo. Anyone have one laying around? I'd really like to put this fine rig on the air.
73,
Jim K4AXFTS-530SPTS-520

56816. Re: Bandswitch ball bearing unit ..

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-31 12:33:19 UTC
From: wagstw46@...
Topic: 56808 Message: 56816

I would not use any kind of Deoxit or oil to lubricate the S22 ball detent mechanism or any of the ball detents rings on any of the rotary switches.

Deoxit in its various formulations contains high percentage of Naptha which is a very strong solvent with very little lubricating quality. See the MSDS sheets for the formulations. Fader lube has some mineral spirits (paint thinner) in addition to Naptha which when it evaporates does leave a slight oily film, but really best suited for lubing of carbon trace pots. You need something that will stick to the peaks and valleys of the detent ring.

These detent mechanisms have two ball bearings retained in a pair of brass spring temper holders. They run in a circle around a ring that has peaks and valleys. The brass spring metal snaps the ball bearings into the valleys to provide very positive detents.
The way I lube the S22 switch detents is to pull the front Final tube. I rotate the bandswitch to get the ball bearings out of the path. This gives about 90 degrees of peaks and valleys accessible. I use a long thin flat bladed screw driver and apply Super Lube silicone based grease (with PTFE) which adheres to the metal. I apply to as many of the peaks and valleys and then run the switch around several times to distribute to the rest of the ring that I cant see or reach. I repeat that multiple times.

As a last step I bring each of the two ball bearings around in to view one at a time and park them on one of the peaks. This spreads the two brass spring metal plates open to expose more of the ball surface. I then apply Super Lube on the ball. I do that on both ball bearings and again run the switch around several times.

I have also tried Magna Lube-G, but I like the Super Lube better as it is thicker and clings nicely to the peaks and valleys of the detent ring. I also use Super Lube on the Drive control shaft two bearing point pedestals and on the plastic shaft bushings at the front sub panel and at the PA cage.

Terry K9TW

56817. Re: Anodized chassis on early 830, they should have had the gold label.

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-31 13:50:56 UTC
From: wagstw46@...
Topic: 56803 Message: 56817

I wouldn't be too quick to taut the quality merits of a 1Mil series TS830S (early run or otherwise) based on it having an anodized chassis and a heavy gauge "transformer shield". In fact I would not own one unless it was near pristine and I got it for a song.

Like pretty much all 1st year production run transceivers once in the hands of the ham owners especially of that era operational experience and mods were fed back to the factory and often improvements were incorporated in subsequent production runs and model years. That is certainly true of the 1Mil TS830s.
Changes that come to mind include:
1. AGC time constants
2. ALC time constants
3. CW and SSB VOX delay time constants
4. CW audio amp frequency response
5. Panel meter electronic RC dampening components
6. Improved VFO Board (frequency stability)

Assuming that your 1Mil has the original Rev0 pc boards then you have none of the performance upgrades.

As for an anodized chassis how many TS830s have you seen and how many of those have a rusted out chassis or even any rust spots on the deck or otherwise?

As to a "transformer shield" are you quite certain you are not looking at a structural member that is less a shield and more of a rear panel/chassis deck stiffner plate? If you grasp the top corner of rear panel near the remote speaker jack of a 2Mil TS830 with the top cover off you can see the significant amount of rear panel flex there is. The opposite corner is stiffened by the PA cage. The thought for the need for a stiffner may have been due to the abundance of jacks and sockets on that corner of the rear panel where pressure and force would be exerted plugging and unplugging mating plugs. As long as the top cover is in place that motion is contained without the need for a heavy bracket.

Regarding shielding the power transformer has a copper electrostatic shield wound in it to reduce primary to secondary noise coupling as well as a rectangular metal plate (thin gauge) is around the entire E I core perimeter to provide magnetic flux shielding. If shielding of the IF board was important on the early 1Mil that it required a very heavy gauge shield why not required on the subsequent models? The strength of the flux leakage from this transformer would never require a plate of that gauge to handle any eddy current heating.

So my recommendation to new folks is to avoid buying any 1 Mil series TS830S and to try to find a 3 to 4 Mil series that has been well maintained. I have a white paper on my website that may help new person when shopping for a KW hybrid.

Terry K9TW

56818. Re: Anodized chassis on early 830, they should have had the gold label.

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-31 14:44:05 UTC
From: kb8tl@...
Topic: 56803 Message: 56818

No, I wouldn't tout anything about my weird anodized chassis radio except the chassis is pretty! But then you put the covers on and.... Bob
KB8TL

56819. Re: Anodized chassis on early 830, they should have had the gold label.

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-31 15:42:49 UTC
From: wagstw46@...
Topic: 56803 Message: 56819

I forgot to mention the other factory change you wont have is the Murata 455khz K12 vs K5 filter. I believe the K12 was installed in subsequent production runs to improve on the alignment of the VBT oscillator to better cascade the 8830 and 455 passband windows. Some folks claim they can hear a difference, but my ear isnt that sophisticated. I have swept both Murata filters and there isnt that much difference.

If you have a 1 Mil series with a K5 filter you can see K12s listed for around $40.00 on Ebay from time to time.

By the way if you are going to use Step 23 prime in the Service Manual to align the VBT oscillator the acceptance waveforms are wrong (reversed). You want a nice sharp zero crossing and it will require a compromise between LSB and USB.

Terry K9TW

56820. Re: [TS-520_820_530_830] Re: Anodized chassis on early 830, they should have had the gold label.

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-31 15:57:36 UTC
From: gary brewer
Topic: 56803 Message: 56820

Hello this is k5geb I have a ts 830s kenwood radio my problem is cw i have went to the audio level to open it i can go to send to send cw but i do not here me sending.2.the kenwood also if i am on 14.045.00 when i go to snd the freq. Goes to. 14.045.8 now what to do to here me sending or am i supposed to here me and why does it move to another freq. But when i go back to rec. It shows 14.045.0.i live and love this radio needed answers.k5geb.

Sent from Yahoo Mail on Android

On Fri, Mar 31, 2017 at 11:42 AM, wagstw46@...
[TS-520_820_530_830]<TS-520_820_530_830@yahoogroups.com> wrote:
I forgot to mention the other factory change you wont have is the Murata 455khz K12 vs K5 filter. I believe the K12 was installed in subsequent production runs to improve on the alignment of the VBT oscillator to better cascade the 8830 and 455 passband windows. Some folks claim they can hear a difference, but my ear isnt that sophisticated. I have swept both Murata filters and there isnt that much difference.

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Terry K9TW

56821. Re: [TS-520_820_530_830] Re: Anodized chassis on early 830, they should have had the gold label.

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-31 15:17:33 UTC
From: Dave
Topic: 56803 Message: 56821

Hi Group,
Just for info, a steel chassis is passivated.
Aluminium is anodized.
Dave f4eyk

-------- Original Message --------
From:"wagstw46@yahoo.com [TS-520_820_530_830]" <TS-520_820_530_830@yahoogroups.com>
Sent:Fri, 31 Mar 2017 15:50:56 +0200
To:TS-520_820_530_830@yahoogroups.com
Subject:[TS-520_820_530_830] Re: Anodized chassis on early 830, they should have had the gold label.

>
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>
>Terry K9TW
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><!-- #ygrp-mkp { border: 1px solid #d8d8d8; font-family: Arial; margin: 10px 0; padding: 0 10px; } #ygrp-mkp hr { border: 1px solid #d8d8d8; } #ygrp-mkp #hd { color: #628c2a; font-size: 85%; font-weight: 700; line-height: 122%; margin: 10px 0; } #ygrp-mkp #ads { margin-bottom: 10px; } #ygrp-mkp .ad { padding: 0 0; } #ygrp-mkp .ad p { margin: 0; } #ygrp-mkp .ad a { color: #0000ff; text-decoration: none; } #ygrp-sponsor #ygrp-lc { font-family: Arial; } #ygrp-sponsor #ygrp-lc #hd { margin: 10px 0px; font-weight: 700; font-size: 78%; line-height: 122%; } #ygrp-sponsor #ygrp-lc .ad { margin-bottom: 10px; padding: 0 0; } #actions { font-family: Verdana; font-size: 11px; padding: 10px 0; } #activity { background-color: #e0ecee; float: left; font-family: Verdana; font-size: 10px; padding: 10px; } #activity span { font-weight: 700; } #activity span:first-child { text-transform: uppercase; } #activity span a { color: #5085b6; text-decoration: none; } #activity span span { color: #ff7900; } #activity span .underline { text-decoration: underline; } .attach { clear: both; display: table; font-family: Arial; font-size: 12px; padding: 10px 0; width: 400px; } .attach div a { text-decoration: none; } .attach img { border: none; padding-right: 5px; } .attach label { display: block; margin-bottom: 5px; } .attach label a { text-decoration: none; } blockquote { margin: 0 0 0 4px; } .bold { font-family: Arial; font-size: 13px; font-weight: 700; } .bold a { text-decoration: none; } dd.last p a { font-family: Verdana; font-weight: 700; } dd.last p span { margin-right: 10px; font-family: Verdana; font-weight: 700; } dd.last p span.yshortcuts { margin-right:

0; } div.attach-table div div a { text-decoration: none; } div.attach-table { width: 400px; } div.file-title a, div.file-title a:active, div.file-title a:hover, div.file-title a:visited { text-decoration: none; } div.photo-title a, div.photo-title a:active, div.photo-title a:hover, div.photo-title a:visited { text-decoration: none; } div#ygrp-mlmsg #ygrp-msg p a span.yshortcuts { font-family: Verdana; font-size: 10px; font-weight: normal; } .green { color: #628c2a; } .MsoNormal { margin: 0 0 0 0; } o { font-size: 0; } #photos div { float: left; width: 72px; } #photos div div { border: 1px solid #666666; height: 62px; overflow: hidden; width: 62px; } #photos div label { color: #666666; font-size: 10px; overflow: hidden; text-align: center; white-space: nowrap; width: 64px; } #reco-category { font-size: 77%; } #reco-desc { font-size: 77%; } .replbq { margin: 4px; } #ygrp-actbar div a:first-child { /* border-right: 0px solid #000;*/ margin-right: 2px; padding-right: 5px; } #ygrp-mlmsg { font-size: 13px; font-family: Arial, helvetica,clean, sans-serif; *font-size: small; *font: x-small; } #ygrp-mlmsg table { font-size: inherit; font: 100%; } #ygrp-mlmsg select, input, textarea { font: 99% Arial, Helvetica, clean, sans-serif; } #ygrp-mlmsg pre, code { font:115% monospace; *font-size:100%; } #ygrp-mlmsg * { line-height: 1.22em; } #ygrp-mlmsg #logo { padding-bottom: 10px; } #ygrp-msg p a { font-family: Verdana; } #ygrp-msg p#attach-count span { color: #1E66AE; font-weight: 700; } #ygrp-reco #reco-head { color: #ff7900; font-weight: 700; } #ygrp-reco { margin-bottom: 20px; padding: 0px; } #ygrp-sponsor #ov li a { font-size: 130%; text-decoration: none; } #ygrp-sponsor #ov li { font-size: 77%; list-style-type: square; padding: 6px 0; } #ygrp-sponsor #ov ul { margin: 0; padding: 0 0 0 8px; } #ygrp-text { font-family: Georgia; } #ygrp-text p { margin: 0 0 1em 0; } #ygrp-text tt { font-size: 120%; } #ygrp-vital ul li:last-child { border-right: none !important; } -->

56822. TS-830S Load Control Acting Up

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-31 18:03:00 UTC
From: ve3fmc@...
Topic: 56822 Message: 56822

The other day the load control started acting up on my TS-830S.

First thing I noticed was the load control was way off from where it used to be on 40 meters.

Then it became very touchy. Power would drop down to 0 watts, then up to 50, up to 100 while loading the radio.

Up until then the radio had full output, and was operating fine. I had the band coupler replaced a couple of days before. Sprayed the band switch contacts with Nutrol, cleaned all the pots etc.

Any ideas as to what would be causing this?

One more thing, when loading the rig I can sometimes hear a little arcing sound, a slight sizzle sound. Now I know that is not good!

Thanks, Rick VE3FMC

56823. Re: TS-830S Load Control Acting Up

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-31 19:30:33 UTC
From: wagstw46@...
Topic: 56822 Message: 56823

Down power rig and unplug and let HV caps discharge. Remove PA cage cover. Open the plates of the Load cap and grasp the drive shaft or white nylon coupler and move the shaft in and out and if you see the plates move forwards and backwards (axially) it means that the "bearing" pivot point at the rear of the frame has backed out. Essentially it is a screw with flat slot cut in head and the opposite end sharpened to a point that rides on the end of the capacitor rotor shaft.

If the pivot point backs out this allows the movable plates to thrust axially and rub against the fixed plates. The plate spacing is very close (broadcast band).

When in the PA cage to replace BS coupler it is always good practice to look at the white sealant thread locker on the rear of the Plate Load cap frame to see if it is cracked and always make this axial thrust test.

Clean off the white sealant as best you can and tighten the pivot point screw to eliminate the free movement, Dont over tighten. Just snug it and test turn the plate load knob to make sure not binding. After snugging apply some nail polish or paint to lock this adjustment.

Hopefully the arcing didnt hurt the cap by transferring metal and raising the metal at the point of the arc which would then greatly reduce the air gap and be a place for repeat arc over during operation. Normal RF volts at 100 watt into 50 ohm resistive is approx 71rms rf volts. With very high SWR can run upward of 150rms rf volts. If it continues to arc it will be very difficult to remove any raised metal and polish the plates due to the very small air gap to get tools in. Might have to contact Walter Dilley and buy a replacement Plate Load cap.

Terry K9TW

56824. Re: [TS-520_820_530_830] TS-830S Load Control Acting Up

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-03-31 20:48:32 UTC
From: Lou Everett, Sr.
Topic: 56822 Message: 56824

Are you loading it up on a dummy load or an antenna?

Lou Everett, Sr., WA5LOU

On Fri, Mar 31, 2017 at 2:03 PM, ve3fmc@... [TS-520_820_530_830] <
TS-520_820_530_830@yahoogroups.com> wrote:

>
>
> The other day the load control started acting up on my TS-830S.
>
> First thing I noticed was the load control was way off from where it used
> to be on 40 meters.
>
> Then it became very touchy. Power would drop down to 0 watts, then up to
> 50, up to 100 while loading the radio.
>
> Up until then the radio had full output, and was operating fine. I had the
> band coupler replaced a couple of days before. Sprayed the band switch
> contacts with Nutrol, cleaned all the pots etc.
>
> Any ideas as to what would be causing this?
>
> One more thing, when loading the rig I can sometimes hear a little arcing
> sound, a slight sizzle sound. Now I know that is not good!
>
> Thanks, Rick VE3FMC
>

>
>
>

56825. File - Message on approved membership.txt

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-01 05:01:56 UTC
From: TS-520_820_530_830@yahoogroups.com
Topic: 54481 Message: 56825

Welcome to the Yahoo Kenwood TS-520_820_530_830 Amateur Radio Group. This group is comprised of members who's interest is in maintaining and operating the Kenwood TS-520, TS-820, TS-530, TS-830, TS-510, TS-511, T-599/R599 and R820 Hybrid transceivers, transmitter and receivers. In addition, the group supports discussions covering the associated Kenwood accessories such as the VFO-520, VFO-820, VFO-230, and VFO-240 remote VFOs, the Kenwood antenna tuners, and the various Kenwood desk and hand microphones.

This is a restricted group requiring membership approval prior to receiving and posting messages to the group. To join the group simply complete the Yahoo Kenwood TS-520_820_530_830 Group's application process by clicking on the “+ Join Group” icon on the group's homepage. Select the desired method of receiving messages by clicking the appropriate radio button, then provide a brief description about yourself to include: your first name, your Amateur Radio call sign, your interest in the Kenwood hybrid radio, and the model of Kenwood hybrid you own, operate, or in the process of purchasing in the text box provided. If you are not a licensed Amateur Radio operator, no problem, simply complete the application process and provide the same information less the Amateur Radio call sign. Once you have completed the text, click the Join Group icon. Your application will be reviewed and approved by a group co-owner or Moderator. If you leave the application text box blank, your application for membership will be rejected. Simply reapply and provide the information requested and resubmit your application for membership.

New members are placed on a "Moderate" status. This means that any message a new member posts to the group must be approved by a group co-owner or Moderator before it appears on the group server for all members to see. The length of time a new member remains in a "Moderate message status" is determined by the members ability to adhere to, and follow the group's policies. The faster the new member(s) can prove they are adhering to, and following the group's policies, the quicker the new member's status will be changed to “Allowed”.

The “Allowed” status means the member can submit/post their messages without group co-owner or Moderator's approval. A member who's message status is set to “Allowed” may have their message status changed to "Moderate" if it is deemed necessary by a group co-owner or Moderator for one of the following reasons:

1. Failure to follow the group's policies after being informed by a group co-owner or Moderator
2. Knowingly violate any of the group's policies
3. Any improper behavior by the member that is deemed inappropriate by a group co-owner or Moderator

The group is moderated by both group co-owners and group Moderators. While we would like to have a group co-owner and/or Moderator present 24/7, that is not possible, as group co-owners and Moderators have a life too. Therefore, there will be times when a group co-owner and/or a moderator will not be present. This will affect the time a moderated member's messages may take to get approved/rejected. This occurs most often during major holidays Also, the group's server is not maintained by the group co-owner(s) or Moderators.

Therefore, when Yahoo has problems affecting Yahoo Groups, ALL members will simply have to wait for Yahoo to fix the problem. Group co-owners and Moderators also do not have any control over how the group's server handles attachments to messages or how message search results are provided.

Page 1

As stated above, this group has a set of policies that all members must agree to and abide by. If any member, new or old, that feels they cannot accept the group's policies, that member is free to terminate their membership at any time without notifying the group co-owners and/or Moderators.

Group's Policies:

1. Profanity of any type, regardless of the word and/or phrase(s) used in a message, is not allowed. This includes the use of abbreviation to improper words, use of symbols to substitute for letters, etc. In short, the use of profanity is NOT ALLOWED, PERIOD!!! The quickest way to get banned from this group is to use profanity!!!

2. Disrespect/Flaming any member regardless of the reason, is not allowed.

3. Taking over a thread by a member that changes the threads original subject and content, is not allowed.

4. Messages that contain as part of the message text, discussions of a member's private life are not allowed. Responses to messages are to pertain to the original message subject.

5. Long discussions that are products of an original messages are not allowed. If there are 2 or 3 members who wish to discuss a subject in more detail and at great lengths should take their discussions off the group and continue their discussions using private email addresses.

6. MESSAGES THAT DO NOT CONTAIN ACCEPTABLE MESSAGE SIGNATURES, WILL BE SUMMARILY REJECTED! It takes less than 5 seconds to ensure your message contains an acceptable message signature. There is no excuse for not adding a message signature to your messages. Political or religious signatures/statements are not permitted.

The following are examples of the ONLY acceptable message signatures:

Licensed Amateur Radio members:

Example:
“73s
John WA1ABC”

Non-licensed members

Example:

73s
Mary

If a member does not wish to include their Amateur Radio call sign in their signature, then simply use their first/given/Christian name ONLY, same as non-licensed members.

Each message signature must be positioned at the bottom of the message text and separated by at least one line.

For example:

Hi John,

Yes capacitor C25 is the right cap you should be checking. For details, review the schematic.

73s
Bill

Screen names such as JLH524 or MWPO125 are not acceptable message signatures. Screen names are acceptable ONLY when used as part of the member's email address.

The member's email address is not an acceptable message signature, regardless whether the member's name appears in the email address or not.

A member's “initials” are not acceptable as a messages signature.

A member may add up to 2 additional lines to their message signature. The additional 2 lines may contain a link to the member's website and a link to the member's Amateur Radio club etc. The addition of 3 or more lines to the message signature, listing the many different clubs the member belongs to, the positions they hold within the respective club(s), their professional position within the company the member works for, and other information is considered excessive and not allowed. The following is an example of an acceptable message signature containing two additional line:

73
Mike-w5rkl
www.w5rkl.com
Yahoo Kenwood TS-520_820_530_830 Moderator (Mike-w5rkl is no longer a Moderator, but used as an example--tnx)

In the past there have been members who state our group policies are too strict. We maintain strict group policies for 2 simple reasons:

1. To maintain good order and discipline in the group.
2. Provide a friendly group where all members are treated equally and an environment free of improper behavior

73
Yahoo Kenwood TS-520_820_530_830 Hybrid Group Co-owners and Moderators.

56826. File - Rules, For Sale or Want to buy Posts

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-01 05:01:56 UTC
From: TS-520_820_530_830@yahoogroups.com
Topic: 54620 Message: 56826

Rules pertaining to Occasional For Sale and Want to Buy Posts.

Members of the TS-520_820_530_830 Yahoo Group who have been members for at least 30 days may place " for sale" posts no more frequently than two in any 30 day period." Want to buy" posts are permitted immediately upon membership and are limited to 2 in any 30 day period.

For sale posts are limited to the sale of TS-510, 515, 520, 820, 530, 830, and the 599 series twins, as well as Kenwood accessories intended for use with these radios.
Also, group members may post "service equipment" for sale. This may include, but are not limited to: vtvms, various signal generators, and other testing/service equipment. Posts must include: the make and model of the item for sale, as well as an accurate description of its condition, and the asking price.

When the item is sold, please make a short post to that effect.

Replies and discussions regarding these posts must be taken off of this group either by direct e-mail to the seller or as directed by the seller.

Buyers and sellers are on their own. The TS-520_820_530_830 Yahoo Group, its owners, co-owners, moderators, or members other than the seller, hold no responsibility for the accuracy of the posts or the credibility of the seller or buyer.

We do not expect that members of this group will misrepresent, or in any way cheat other members. At the co-owners(s)/moderators discretion, we may choose to ban any member from making further for sale posts, or ban the member from this group entirely if we believe their posts or transactions are not of the utmost integrity.

We ask that those who buy and sell equipment as a main business not post here. We will allow posts from members who occasionally restore and sell equipment/accessories as stated above.

We expect our members to use discretion. If excessive traffic develops as a direct result of these postings, they may have to be discontinued.

Walter Breining, N9WB
Joseph T Stiles, WB7UQU

56827. Re: TS-830S Load Control Acting Up

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-01 12:31:24 UTC
From: wagstw46@...
Topic: 56822 Message: 56827

Rick:

The reason I didnt ask about antenna vs dummy load is because the radio employs RF negative feedback and almost impossible to arc anything over in the Tank as the RF voltage across the tank is sampled by a 3pf cap and fed back to the Driver tube where it reduces the RF drive which is applied to the Final tube control grids which then reduces RF output and of course reduces the peak RF voltage across the Plate load cap.

If you unscrew the PL-259 (or have a bad solder connection) and attempt to load will be loading into a high Z and will see higher than normal RF voltage. With the plates of the Plate Load cap completely unmeshed can see approx 300rms or 424 peak rf volts. I have DC Hi-pot tested several load caps and typically it can hold off approx 800-1000vdc.

By the way the Plate Tune or tank cap can typically hold off 2000vdc or more. These voltage levels assume no foreign material between the plates, no corrosion, and no damage to plates that would have resulted in air gap reduction.

If you were using a random length end fed antenna then you can see impedances in the 2000 to 5000 ohms range. Assuming 3000 ohms then RF voltage would be approx P = V x V /R or 100 = VxV/3000 or 547 rms or 773 peak rf volts. So attempting to load into an antenna that presents 3000 ohms might arc over the plates of the Load cap especially if dirty. If the antenna presents 4000 to 5000 ohms then most likely the load cap would arc over.

Two other possibilities exist:
1. Very dirty PA cage with dust, clinging oily dirt, cobwebs, insect material maybe even bridging the plates of the Plate load cap. This can cause arcing, but normally once arc has happened the dust bridging is cleared away.

2. You said you changed out the white nylon BS coupler. It is very easy to tip the coupler downward at the rear end as you slide it off the S22 stub shaft and let the coupler touch the movable plates of the Neutralizing capacitor and to close up the air gap and maybe even lightly contact the fixed plate if too much downward force is applied during removal. If this has happened you will see very erratic indications on ALC and Plate current and will hear sizzling or frying sounds as you load. Can usually dim the lights and watch the hole in the PA cage and focus on area below the end of the brass coupler to see if any purple fire from that area. Can also down power rig and turn the neutralizing capacitor and listen carefully for any plate rubs. I just had one of these last month. Easy to turn the neutralizing capacitor and get those movable plates out of the way during coupler replacement.

I have seen all these problems, but the most common is the bearing pivot screw backing out of the Plate Load cap frame end plate allowing the movable plates to shift axially as the knob is turned. Due to very close spacing easy to rub and or just close up the air gap enough to arc over and it will be random as you describe.

If you are trying to load into an open or very high Z impedance antenna, I suspect that you would have been doing so prior to changing the coupler and doing so without a problem?

Again very hard to arc over a TS820 or TS830 due to the RF negative feedback circuit. It is possible, but not as likely as with the other Hybrids.

We will all be interested in what you find.

Terry K9TW

56828. Kenwood Filters, plus test equipment FS

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-01 13:48:58 UTC
From: Ken, W8EK
Topic: 56828 Message: 56828

Kenwood Filters, plus test equipment For Sale:
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Kenwood YK-88 Crystal Filters:

These are "solder in" type filters used on rigs such as the
TS-120, TS-130, TS-430, TS-440, and others of this era.
They work 100%, and include paper work.

Kenwood YK-88 S Crystal Filter
This solder in filter is 2.4 KHz wide and used for SSB. $60

Kenwood YK-88 C Crystal Filter
This solder in filter is 500 Hz wide and is used for CW and
digital modes. $70

Buy both of the above for $120.
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Linear Amp Switching Cables for Kenwood Rigs:
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This cable goes from a Kenwood transceiver to a linear
amplifier to switch the amp from transmit to receive.

One end has a DIN connector, as is used with most Kenwood
rigs. The other end has an RCA phono plug, as used by most
linear amplifiers.

Before using this cable, please check the switching
capabilities of your transceiver, and the requirements
of your amplifier.

Cable for switching the T/R relay Only $15.

Cable as above, but with ALC line in addition to T/R switching.
$20
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Kenwood MC-43 Hand Microphones:

The Kenwood MC-43 is the hand mic that comes with
most of the Kenwood rigs when bought new. It has
the round 8 pin connector on it, and is a dynamic
microphone, so it does not need a polarizing voltage

as an electret mic does.

In addition to the PTT switch, there are up and down
buttons on the top to change the frequency.

Both of these work 100%, and include paper work.

NEW MC-43
This one is still in its original box, unused. $40

Slightly used MC-43
It looks close to new, but has been used. $35
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Eico 378 Audio Generator For Sale:

Based on a highly reliable circuit, the 378 Audio Generator
produces a very low distortion sine wave signal over a very
wide range of frequencies and is ideal for use in testing
audio amplifiers for gain and frequency response, as a signal
source for various bridge measuring circuits, for modulation
of RF signal generators, or any other application where a
stable, accurate audio sine wave must be used.

Unlike most other audio generators that require interpretation
of a dial setting with possible error, the frequency determining
elements of the Model 378 are set by positive setting detent
switches that select combinations of 1% resistors and 2%
capacitors.

The output level of this instrument can be set with great accuracy
between 0 and 10 volts RMS on a large 4-1/2 inch meter.

This one works fine, and looks very nice.
Paper work included for $60.
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Eico 147 A Signal Tracer

I really do not know much about this unit, other than
it came from the estate of a silent key. I have used
a lot of test equipment over the years, but never anything
like this. Bottom line is I really do not know how to
test it. So assume that it does not work, and it is only
good for parts, and that if it does work, it is a bonus,
although I should say that everything else from this
silent key worked fine.

More info at
http://www.radiomuseum.org/r/eico_signal_tracer_147a_147_a.html

There is one on e-bay at the moment in the same untested
condition, presently with a $57 bid.
Buy this one, with paper work, for only $20.
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Fluke 7261 A, Counter/Timer:

The Fluke 7261A Universal Counter/Timer measures frequencies
to 125MHz while offering good resolution accuracy. It incorpor-
ates a 100MHz clock providing 10 ns resolution! Makes time-
interval or single-period measurements and will average from
100 to 105 such measurements per reading when greater res-
olution or accuracy is desired. 1X, 10X, or 100X selectable
attenuation and a switchable 100kHz low-pass filter are also
provided. It has two inputs, permitting ratio measuring, plus
many other exotic features.

Although the specs only list it good up to 125 MHz, it measures
2 meter frequencies just fine, and with much greater accuracy
than most counters.

This one works as it should, and looks extremely nice.
Only $75.

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LG (EZ Digital) 1.5 GHz Frequency Counter:

The LG (EZ Digital) FC-7150 1.5GHz Frequency Counter
measures frequencies between 0.1Hz~150MHz in A input,
50MHz~1.5GHz in C input. Input A measures Period, Total,
and RPM. It has a 9 Digit display.

Features:
Frequency measuring range: 0.1Hz~150MHz in A input,
...50MHz~1.5GHz in C input
Period/Total/RPM measurement for input A
9 digit display
High sensitivity external reference input function
Microprocessor controlled
Reciprocal technique for high resolution at low frequency
Push-scanning for selecting function and gate time
Low-pass filter installed for removing noise signal
AC/DC coupling function with selectable X1 / X10 attenuator
Data hold function

More info at
http://www.instrumentsgroup.co.za/index_files/EZdigital/FreqCounter/FC7015U,FC7150U,Series
.pdf

This unit works 100%, and looks extremely nice.

With paper work for $250.
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HP 5306 A, Precision DMM and Counter:

The HP 5306 A is a precision 4 1/2 digit digital multi meter and counter combination unit. This is a lab quality precision instrument. It is not a very high precision, $10,000 unit, but is right below that category. It is much better than the standard "bench" meter. It measures DC and AC voltages to 1000 V (AC frequency response from 40 Hz up to 100 KHz), and resistance to 10 Megs. Input impedance is 10 Meg, with extremely high (over 80 db) Common Mode Rejection Ratio.

It also has a built in frequency counter, as an added bonus.
It is in a metal, shielded, enclosure, and is powered by 120 V AC.

This one works 100% with really great accuracy. It looks extremely nice.
Paper work is included for only $200.
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HP 3476 A Digital Multi Meter:

The HP model 3476A is a 3½-digit instrument that measures dc and ac volts, dc and ac current, and resistance. It has autoranging and autopolarity selection but it also has a range-hold function that retains a range regardless of input changes. Note that it measures AC currents, which many do not measure.

Full-scale ranges are from ±0.110V to ±1000V dc and ac, ±0.110 to 1.10A dc and ac, and 1.10kΩ to 11,000kΩ. The frequency range for ac voltage and current measurements is 45Hz to 5kHz.

This is a very high quality DMM for the bench.
It has a calibration sticker on it (that is out of date), which shows the quality of this meter.

This particular unit works as it should, although there is a segment of the LED readout that is out, but this does not detract from its accuracy and usefullness. It is in very nice cosmetic condition.

With paper work for $120.
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RCA WR-69 A Sweep Generator:

The WR-69 A is a sweep generator that is used
to align FM radios and TV sets.

More information is available at
http://www.radiomuseum.org/r/rca_television_fm_sweep_gene.html?language_id=2

I do not know much about this unit, except that apparently
it works. When I connect a scope, I see a sine wave at the
output. Beyond that I really do not know how to test it.

It looks great. Paper work is included for $40.
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I also have many other accessories available such as many
different types of microphones, HTs, VHF and UHF rigs, HF
and VHF/UHF antennas, connectors, miscellaneous accessories,
etc.
Just too many to list here. Please e-mail your requests.
.

Prices do not include shipping from Florida.

Thanks.

73,

Ken, W8EK

Ken Simpson
E-mail to W8EK@... or W8EK@...
Voice Phone (352) 732-8400

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56829. Re: [TS-520_820_530_830] Re: Anodized ... actually a question about Rx Tx 800 Hz offset

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-01 02:59:06 UTC
From: incorridge@...
Topic: 56803 Message: 56829

Hi Gary, My TS-830S also shifts 800 Hz between receive and send on CW. I think this is done so that we will transmit on the same frequency of the person we're talking with. But to succeed, I think we'd have to tune the other station in such that their CW tone is at 800 Hz. I'm considering making an 800 Hz oscillator for use as a reference. As for hearing the sidetone while transmitting...I think the Mic Gain or some other control serves as a sidetone volume control during CW transmit.
Cheers
Halden NR7V

56830. Re: [TS-520_820_530_830] Re: Anodized ... actually a question about Rx Tx 800 Hz offset

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-01 16:09:55 UTC
From: Joseph Stiles
Topic: 56803 Message: 56830

Gary, et al,
The shifting of the frequency display while you transmit CW is normal. You can refer to Pg 20 Section 4.4 (5) of the TS-830S Instruction Manual and, the top left of Pg 7 (VFO) of the Service Manual.
You can use your rig as a reference oscillator. Make sure that you are in CW mode, VOX is OFF, send/rcv switch in RCV, while listening to your target signal, depress your key...you will now hear your sidetone superimposed on the target signal...adjust your main tuning so the signals are zero beat...release key....your signal and the target should now be the same.
The above assumes that your RIT and IF shift knobs are at their center position and have been properly adjusted per Service Manual.
 73
Joe wb7uqu

On Saturday, April 1, 2017 8:39 AM, "incorridge@... [TS-520_820_530_830]" <TS-520_820_530_830@yahoogroups.com> wrote:

  Hi Gary,My TS-830S also shifts 800 Hz between receive and send on CW. I think this is done so that we will transmit on the same frequency of the person we're talking with. But to succeed, I think we'd have to tune the other station in such that their CW tone is at 800 Hz. I'm considering making an 800 Hz oscillator for use as a reference. As for hearing the sidetone while transmitting...I think the Mic Gain or some other control serves as a sidetone volume control during CW transmit.CheersHalden NR7V

56831. Re: [TS-520_820_530_830] Re: Anodized ... actually a question about Rx Tx 800 Hz offset

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-01 16:04:29 UTC
From: Louis Wilen
Topic: 56803 Message: 56831

The adjustment for the sidetone level is VR1 on the AF board. VR1 can be accessed through a hole in the bottom on the rig. There is (or should be) a label on the bottom of the rig that shows which hole gives access to the sidetone level potentiometer. It is best to use a non-conducting tool, such a ceramic screwdriver or plastic alignment tool to adjust VR1 (or to adjust anything, for that matter).

The front panel audio gain control also controls the sidetone level in the same way that it controls all audio.

The 800 hz shift when sending is part of the design and works as Halden described below.

Louis W3VVV

On 3/31/2017 10:59 PM, incorridge@... [TS-520_820_530_830] wrote:
>
> Hi Gary,
>
> My TS-830S also shifts 800 Hz between receive and send on CW. I think
> this is done so that we will transmit on the same frequency of the
> person we're talking with. But to succeed, I think we'd have to tune
> the other station in such that their CW tone is at 800 Hz. I'm
> considering making an 800 Hz oscillator for use as a reference. As
> for hearing the sidetone while transmitting...I think the Mic Gain or
> some other control serves as a sidetone volume control during CW transmit.
> Cheers
> Halden NR7V
>

56832. TS520S VFO output signal level

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-01 23:37:18 UTC
From: lonelyone_64109@...
Topic: 56832 Message: 56832

Can anyone give me the output level of the main VFO in a 520S as measured with a scope? I've got one that shows 60mV peak to peak. The schematic I have is showing .8 V RMS. Both the carrier and heterodyne oscillators show much higher output.

WB0CJB

56833. Re: TS520S VFO output signal level

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-02 01:38:23 UTC
From: wagstw46@...
Topic: 56832 Message: 56833

The Service Manual has the correct procedure for adjusting the VFO output level.

Set the VFO to 300 and measure RF voltage level at the IF board at TP-V. Correct level is 1.0rms or 2.828v P-P. (yes schematic shows 800mv rms). Anything from 800mv to 1000mv will provide proper mixing action.

It is easier to just connect scope to wire wrap terminal post near R42 on the outer edge of the IF board where they show connecting the Freq Counter than prodding at TP "V". Easy to slip off of the top of "V" post which is at angle just below TP-1.

Recognize that if you are going to align the VFO that L1 and TC-1 are shown swapped and that L1 brass lead screw threads are very securely locked and very easy to break off one of the two tangs/ears of the adjustment slot trying to break it free. Best to compromise alignment for mid range tracking by just adjusting TC-1.

Terry K9TW

56834. Re: For sale 830s and VFO

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-02 03:46:22 UTC
From: yioutta_99@...
Topic: 56782 Message: 56834

I need to update this. Its an 820s for sale. (NOT an 830) along with the 820 VFO. I have now listed it on Ebay as well. sorry for the mistake.

steve

56835. Re: TS520S VFO output signal level

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-02 11:50:52 UTC
From: wagstw46@...
Topic: 56832 Message: 56835

I forgot to ask do you have the 8/9 shorting plug installed and is it making good contact? Is the VFO LED illuminated on front panel?

Can also unplug two pin connector on rear of the VFO and measure to make sure have 9vdc regulated.

Also, measure the VFO output at the wire wrap post on the AVR board. Not uncommon for the center conductor of the mini-coax to have broken off there especially if someone has lifted the board to replace the HV filter caps.

About lowest rf output level you should be able to obtain with the trimmer cap is approx 500mv rms.

I assume that this isnt a 1X vs 10X scope probe error? Since you report being able to measure the Het and Carrier Osc levels properly.

Terry K9TW

56836. Re: TS520S VFO output signal level

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-02 14:08:01 UTC
From: lonelyone_64109@...
Topic: 56832 Message: 56836

I am using a 10X probe and checked the VFO output on the VFO jack that the DG-5 connects to. Also to the VFO connection on the IF board. Both points read only 60mV using the 10x probe. I checked both the carrier and heterodyne oscillators and their outputs are much greater than the VFO.

I pulled the VFO out and took the outer cover off. With the VFO powered up the output going into D3 was nearly 1 volt. But coming out of D3 that's where it was extremely low, nowhere near what I saw going into D3.

I haven't touched up the solder joints on D3 yet (it was 1 AM). Even though the joints look fine its possible that might be the problem. If not then D3 is bad and time for a replacement. I haven't touched anything else inside the VFO as there isn't any reason to mess with anything else, except to clean and oil the main tuning cap.

I do have another question that's unrelated: what's the voltage rating of C7 on the final (PA) board? While replacing the open cathode resistors I noticed C7 had a chunk blown out of it and its insides was burnt. Probably failed when the rig was fired up after years of storage. I doubt the owner used a variac when he powered the radio up.

WB0CJB

56837. For Sale TS-830S/VFO230/MC-50

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-02 17:13:28 UTC
From: redondotom@...
Topic: 56837 Message: 56837

Hi, I have in nice condition a Kenwood TS-830S, VFO-230 extrenal VFO and MC50 Mic 830 has new tubes, relays and caps. All working perfect. Local Pick Up from Redondo Beach, CA. Can Demo. $600 Tom KK6BD
310 508-6333

56838. Re: TS520S VFO output signal level

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-02 17:52:18 UTC
From: wagstw46@...
Topic: 56832 Message: 56838

If you have 1v rms RF at the anode of D3 then it means that the emitter of Q4 has to be seeing ground thru D3, L6, and R9. Did you measure the RF sig level at the cathode of D3 and then at center pin of the RCA jack on the VFO? If you have good level at RCA jack maybe the mating RCA plug in the rig has bad center pin solder connection? Maybe even center conductor of mini-coax has broken off inside RCA plug and barely making contact?

It would be rare, but possible have bad C18 coupling cap if the rf voltage at the RCA jack is 60mv or bad solder connection which would be rare.

C7 is cathode bypass cap and rated at 50wvdc. Might want to replace all of them. It is not a Class 1 temp coefficient cap.

Terry K9TW

56839. Re: TS520S VFO output signal level

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-02 23:54:30 UTC
From: lonelyone_64109@...
Topic: 56832 Message: 56839

With the scope set for 20 mV per division and using a X10 probe I get approximately 1580 mV waveform on the anode of D3. On the cathode of D3, the input and output of C18, and the center pin of the phono jack I get 160 mV of waveform. The power supply is set for 8.7 V and total current draw is 10 ma.

Right now the VFO output jack is not connected to anything which I did wonder about it needing a load on the output. But in the rig the VFO output may be a little lower if its connected to the IF board.

WB0CJB

56840. Re: TS520S VFO output signal level

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-03 11:33:41 UTC
From: wagstw46@...
Topic: 56832 Message: 56840

I dont have a TS520S VFO out of the rig at this time. However, I do have good notes taken over the years.

Here is what I have:

1. VFO on bench set to 300 (with a clean rotor shaft wiper contact)
2. 9.0vdc regulated applied to the Red lead wire (not the orange RIT lead).
3. Current draw ranges between 14.28ma and 14.61ma depending on where the trimmer cap is set for rf output level.
4. Trimmer cap adjusted for lowest RF output level = 600mv rms or 1697mv P-P
5. Trimmer cap adjusted for highest RF output level = 1.9v rme or 5.37v P-P

In the radio the RF output mini coax first terminates at the AVR board and then goes to the IF board.

I wonder if L6 has shorted turns and is sucking the RF to ground. With shorted turns it would still provide good DC path for emitter of Q4 and bias D3 on hard. Would be unusual for L6 to fail.

I dont remember if you can take CBE dc voltages on Q4 or not? Might be worth doing it. If Q4 CBE is normal especially the base emitter junction then I would replace L6.

Could also try replacing D3, but seems odd that it would be biased on sufficiently to provide Q4 dc emitter path and not rf signal path.

With your 10ma of current draw it would seem to indicate that Q4 is not biased on properly yet you report normal RF signal level at Anode of D3?

Terry K9TW

56841. Info mic quality for ts 820s

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-03 15:04:47 UTC
From: francotocci@virgilio.it
Topic: 56841 Message: 56841

Prejudice is a new netgroup members wanted to ask for diminuive the high notes on my TS 820S What can I change I use microphone turner + mc 2 and mc50 but listen to me with lots of high tones what can I do?

By
Iz8jfa
italy

[Non-text portions of this message have been removed]

56842. Re: TS520S VFO output signal level

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-03 16:18:28 UTC
From: wagstw46@...
Topic: 56832 Message: 56842

I found some more notes on a 3x5 card in a TS520S hanging folder. I have file folders and notebooks. Unfortunately I havent always been very good at organizing all the notes and measurements I have taken over the years.

The notes include the following:

1. The Q4 CBE voltages are as follows with 9vdc applied and TC-2 adjusted for 1000mv rms or 2.8v P-P rf output:
C= 9.0vdc
B= 2.6vdc
E= 1.8vdc (note that the schematic is wrong as it shows emitter at 1.0vdc)

2. D3 anode = 1.8vdc and cathode = 1.0vdc.

The 0.7 to 0.8 Q4 BE junction makes more sense than the greater than 1.0vdc that the schematic shows.

The manual tells us that D3 is a 1N60 germanium signal diode, but the junction voltage looks more like it is a silicon switching diode? I have never had to replace D3 or Q4.

OK that exhaust any help I can provide.

Terry K9TW

56843. Smoked R203 (IF bd)

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-03 17:51:58 UTC
From: bobcolenso@...
Topic: 56843 Message: 56843

So I was doing some work on one of my '830's, electrolytics, bandswitch, pots and switches, that kind of stuff. Got it all back together and powered it up, and promptly smoked R203 (470 ohm 2W) on the IF board.

One side of the resistor goes to the rectifier board via connector 14-4, the other side goes to the RF board via connector 15-1. Taking some resistance readings, I found that I had section 7 of the bandswitch (S1-7) 180° out of phase. As I'm calling myself names and wiggling the bandswitch shaft (did I REALLY do that?), I noticed that I also had S1-6 180° out. The other five sections were properly aligned.

The other side of the resistor (rectifier bd) looks OK.

So would this (switch sections being in wrong) cause that problem? Maybe I should get a few replacement resistors and not just one!

Thanks,
Bob-KD8WU

56844. Re: Smoked R203 (IF bd)

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-03 19:33:06 UTC
From: wagstw46@...
Topic: 56843 Message: 56844

Bob

R203 is part of the 300 supply C-R-C pi-filter. The most common way for it to burn up would be if C178 pi-filter output capacitor was shorted. Did you change out the 4 300/210 filter caps next to R203?

If C178 is OK then perhaps having the wrong LC tank circuit switched in to the Plate of the Driver Tube may have resulted in high off resonance Driver tube plate current.

Also, you may have hurt the 12BY7A Driver tube,resistor R38, and/or RF plate choke L36. Normal plate current is approx 25ma.

L36 does fail from time to time. Most common with shorted turns. Usually this will manifest itself with low rf drive on 18mhz and 21mhz. L36 is a green can just to left of the 160 meter drive coil (red slug). With a flashlite look at the body for any signs of a black or brown discolored band running around the circumference.

You can also measure the current thru R203 when loading. Do that by clipping mini-grabber test lead on each resistor lead and measure the dc IR drop when loaded. Should see something between 11vdc and 12vdc at 100watt output. I = 12v/470ohm = 25.5ma. If you see approx 12vdc then Driver tube most likely not hurt.

Should not have to carry a supply of either of the two 470 ohm pi-filter resistors and expect them to burn up on some regular basis. Most common failure is due to abuse and hot-rodding mods.

Terry K9TW

56845. Info regolation tone microphone for ts 820s

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-03 19:08:02 UTC
From: francotocci@virgilio.it
Topic: 56845 Message: 56845

Good evening I have a TS 820SI tried all the microphones but the audio quality is always very high tones internally where we must intervene to have more bass you can change somethingyou wait your answer

By
Iz8jfa

[Non-text portions of this message have been removed]

56846. Re: Info regolation tone microphone for ts 820s

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-03 20:01:48 UTC
From: drew@...
Topic: 56845 Message: 56846

Has the crystal filter passband been aligned per the service manual?

73,
Drew K3PA

---In TS-520_820_530_830@yahoogroups.com, <francotocci@...> wrote :

Good evening I have a TS 820SI tried all the microphones but the audio
quality is always very high tones internally where we must intervene to have
more bass you can change somethingyou wait your answer

By
Iz8jfa

[Non-text portions of this message have been removed]

56847. Re: [TS-520_820_530_830] Re: Info regolation tone microphone for ts 820s

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-03 20:23:48 UTC
From: francotocci@virgilio.it
Topic: 56845 Message: 56847

Hello can you send me the page where you need to adjust

By
Iz8jfa

-------Original Message-------

From: drew@... [TS-520_820_530_830]
Date: 03/04/2017 22:04:52
To: TS-520_820_530_830@yahoogroups.com
Subject: [TS-520_820_530_830] Re: Info regolation tone microphone for ts 820s

Has the crystal filter passband been aligned per the service manual?

73,
Drew K3PA

---In TS-520_820_530_830@yahoogroups.com, <francotocci@...> wrote :

Good evening I have a TS 820SI tried all the microphones but the audio quality is always very high tones internally where we must intervene to have more bass you can change somethingyou wait your answer

By
Iz8jfa

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

56848. Re: [TS-520_820_530_830] Re: Info regolation tone microphone for ts 820s

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-03 20:48:19 UTC
From: drew@...
Topic: 56845 Message: 56848

I don't own a TS-820. Do you have the necessary test equipment to align an IF and set carrier oscillators?

73,
Drew K3PA

56849. Re: Info regolation tone microphone for ts 820s

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-03 22:05:21 UTC
From: wagstw46@...
Topic: 56845 Message: 56849

If you do not own a decent audio generator and wattmeter to perform the mic line audio injection method to set the 6dB roll off you can use your TS820S Moni function to adjust the LSB/USB carrier oscillator trimmer caps.

Put on a pair of headphones and adjust the LSB and USB trimmers for a more bass response listening to your own voice.

See Message 56770 recently posted.

Terry K9TW

56850. Re: Smoked R203 (IF bd)

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-03 22:58:05 UTC
From: wagstw46@...
Topic: 56843 Message: 56850

Bob:

Disregard looking for damage to R38 470K resistor.

I forgot its function and didnt look hard enough at the Driver tube plate B+ circuit. The 340vdc plate voltage is fed thru L36 RF Plate choke and then thru bandswitch selected tank circuits L23 thru L31. R38 is normally shunted by the selected tank coil and sees very little plate current.

R38 only comes in to play if the selected tank coil should burn open. R38 is a safety resistor that provides a parallel and alternate path for plate voltage in the event that a tank coil should burn open. If that were to happen in the absence of R38 the Driver tube would have Screen grid voltage and no Plate voltage and the Screen would act like the Plate and heavy SG current would flow and could easily exceed the dissipation of the screen grid and destroy the tube. Never want to run with sg voltage and no plate voltage.

If switching in of the wrong tank circuit caused high off resonance driver tube plate current to flow the vast majority of that current would have flowed thru the tank coil and a very small amount of current thru the parallel B+ feed path of R38. At 470k ohm very little current.

The only Hybrids that have this parallel or alternate driver tube plate voltage safety resistor are the TS820S and the TS530/830 models. On the TS820 it is R55.

Terry K9TW.

56851. Re: [TS-520_820_530_830] Something Bizzarre on the IF board

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-04 02:58:13 UTC
From: Walter Dilley
Topic: 56780 Message: 56851

Hello Joe,

Yes, those cuts are deliberate. I looked at two TS-530S IF boards that I have in stock and both have those cuts. It looks like Kenwood was trying to solve a possible "ground-loop" problem. I haven't looked at what ground path is being isolated, but I've seen the technique used in other places (other than Kenwood).

I would leave the cuts as they are.

Walter, kd7dny

On Sun, Mar 26, 2017 at 11:11 AM, Joe outwestcw@... [TS-520_820_530_830] <TS-520_820_530_830@yahoogroups.com> wrote:

>
>
> Hello, today well I was working on replacing some capacitors on the IF board I noticed something strange.
>
> It appears that someone along the line has made some cuts on the board through the traces. Here is a link to the picture. https://www.flickr.com/gp/153165435@N04/0mj38p
>
> I can only assume that someone was modifying the board, the cuts look very deliberate. I would say if they were cut using a Dremel.
>
> I was wondering if anybody has ever seen something like this, or would you,recommend that I bridged these back to the original way they were.
>
> Thank you for any help!
>
> Joe
>
>
>
>
>
>
>

56852. Re: [TS-520_820_530_830] Want to buy a DS-2 or DS-1a Converter

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-04 03:04:30 UTC
From: Walter Dilley
Topic: 56365 Message: 56852

Hello Gary,

I just picked up two TS-520 rigs that have the DC converter. If you are still in need, please contact me off-list.

Thanks,
Walter, kd7dny
(walter.dilley@...)

On Sat, Jan 7, 2017 at 9:25 AM, kg6axx@amsat.org [TS-520_820_530_830] <TS-520_820_530_830@yahoogroups.com> wrote:

>
>
> I have a TS 520S that works great on commercial power but am looking to
> run off grid. Anybody know where I can get a converter? No luck on ebay or
> QRZ forum.
>
>
> 73's
>
> Gary KG6AXX
>
>
>
>

56853. Re: [TS-520_820_530_830] Re: Info regolation tone microphone for ts 820s

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-03 22:25:46 UTC
From: francotocci@virgilio.it
Topic: 56845 Message: 56853

Ok thanks you tell me which is the trimmer that you have to adjust?

You can tell me the trimmer to adjust ?

Franco iz8jfa

-------Original Message-------

From: wagstw46@... [TS-520_820_530_830]
Date: 04/04/2017 00:05:24
To: TS-520_820_530_830@yahoogroups.com
Subject: [TS-520_820_530_830] Re: Info regolation tone microphone for ts 820s

If you do not own a decent audio generator and wattmeter to perform the mic line audio injection method to set the 6dB roll off you can use your TS820S Moni function to adjust the LSB/USB carrier oscillator trimmer caps.

Put on a pair of headphones and adjust the LSB and USB trimmers for a more

bass response listening to your own voice.

See Message 56770 recently posted.

Terry K9TW

[Non-text portions of this message have been removed]

56854. Re: [TS-520_820_530_830] Re: Info regolation tone microphone for ts 820s

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-04 12:02:04 UTC
From: wagstw46@...
Topic: 56845 Message: 56854

Go to W0NTA website and down load the Service Manual. Dick Housden has nice high res copies. Look at page 50 and you will see steps for adjusting the Carrier Set Point (SSB frequency response).

Locate the Carrier Osc can on the bottom side of your radio.

CAUTION: Be aware at the HV capacitors and the HV rectifier board there is 900vdc with enough ampacity to kill you.

You will be adjusting trimmer caps TC-1 and TC-2. CAR-1 is a narrow and rectangular chromate colored (Yellow/Green) metal can near the Final board. You can shine a light into the adjustment holes and see the white labeling for the USB and LSB carrier oscillator trimmer caps.

You will need a long insulated thin flat bladed adjustment tool to insert thru the top PC board and engage the slot in the ceramic trimmer caps deep in the hole.

Facing the can the top right hole is for USB. The middle hole is for LSB. The third hole is VR-1 trimmer for balance. Dont adjust VR-1. You cannot properly adjust it using the Moni method.

Be aware that many of the steps in the Service Manual are inaccurate. When in doubt ask on this forum.

Terry K9TW

56855. Re: Smoked R203 (IF bd)

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-04 18:17:38 UTC
From: bobcolenso@...
Topic: 56843 Message: 56855

Thanks Terry. ALL of the electrolytics are new, I bought the kit from either Hybrid Jim or Canadian Pete (can't remember. I've used them both).

L-36 has no discoloration. I checked C-178; it is not shorted and you can see it charging with the meter on it (in circuit measuring from connectors 14-2 and 15-1). Switching the Fluke 115 to read capacitance it reads 21.6uF.

I do have a NOS 12BY7A from Ken. I'll try dropping that in, along with a new 470 ohm 2W resistor, and try this again.

Thanks again
Bob-KD8WU

56856. FS TS-830S/MC-50/VFO-230

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-04 18:58:51 UTC
From: redondotom@...
Topic: 56856 Message: 56856

I have in very nice condition a Kenwood TS-830S, MC-50 Mic and VFO-230. 830s has all new tubes, new caps and new relays. Also spare set of new tubes! Local pickup from Redondo Beach, area. Tom KK6BD 310 508-6333 $600.00

56857. Re: [TS-520_820_530_830] Re: Info regolation tone microphone for ts 820s

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-04 15:56:36 UTC
From: francotocci@virgilio.it
Topic: 56845 Message: 56857

Adjustment is fine, but the power in cw with GVW to 50 watts is decreased At

I adjusted tc1 and tc2 now modulation is perfect but the power in cw is dimuita to 50 watts

Modulation is now perfect both in lsb and USB, but in cw with ptt pressed the power is decreased to 50 watts

Iz8jfa
franco

-------Original Message-------

From: wagstw46@... [TS-520_820_530_830]
Date: 04/04/2017 14:02:07
To: TS-520_820_530_830@yahoogroups.com
Subject: Re: [TS-520_820_530_830] Re: Info regolation tone microphone for ts 820s

Go to W0NTA website and down load the Service Manual. Dick Housden has nice high res copies. Look at page 50 and you will see steps for adjusting the

Carrier Set Point (SSB frequency response).

Locate the Carrier Osc can on the bottom side of your radio.

CAUTION: Be aware at the HV capacitors and the HV rectifier board there is

900vdc with enough ampacity to kill you.

You will be adjusting trimmer caps TC-1 and TC-2. CAR-1 is a narrow and rectangular chromate colored (Yellow/Green) metal can near the Final board. You can shine a light into the adjustment holes and see the white labeling for the USB and LSB carrier oscillator trimmer caps.

You will need a long insulated thin flat bladed adjustment tool to insert thru the top PC board and engage the slot in the ceramic trimmer caps deep in the hole.

Facing the can the top right hole is for USB. The middle hole is for LSB. The third hole is VR-1 trimmer for balance. Dont adjust VR-1. You cannot properly adjust it using the Moni method.

Be aware that many of the steps in the Service Manual are inaccurate. When

in doubt ask on this forum.

Terry K9TW

[Non-text portions of this message have been removed]

56858. Re: [TS-520_820_530_830] Re: Info regolation tone microphone for ts 820s

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-04 20:40:20 UTC
From: wagstw46@...
Topic: 56845 Message: 56858

Where is the CAR Level pot set? Did you try opening it full clockwise?

What is IP indicating at 50 watts output?

What is HV indicating? If around 450vdc you have lost one of the two HV filter caps.

How much experience do you have loading the TS820S?

If limited experience go to You Tube and download Alan W2AEW Video #153.

Terry K9TW

---In TS-520_820_530_830@yahoogroups.com, <francotocci@...> wrote :

Adjustment is fine, but the power in cw with GVW to 50 watts is decreased At

I adjusted tc1 and tc2 now modulation is perfect but the power in cw is
dimuita to 50 watts

Modulation is now perfect both in lsb and USB, but in cw with ptt pressed
the power is decreased to 50 watts

Iz8jfa
franco

-------Original Message-------

From: wagstw46@... mailto:wagstw46@... [TS-520_820_530_830]
Date: 04/04/2017 14:02:07
To: TS-520_820_530_830@yahoogroups.com mailto:TS-520_820_530_830@yahoogroups.com
Subject: Re: [TS-520_820_530_830] Re: Info regolation tone microphone for ts
820s

Go to W0NTA website and down load the Service Manual. Dick Housden has nice
high res copies. Look at page 50 and you will see steps for adjusting the

Carrier Set Point (SSB frequency response).

Locate the Carrier Osc can on the bottom side of your radio.

CAUTION: Be aware at the HV capacitors and the HV rectifier board there is

900vdc with enough ampacity to kill you.

You will be adjusting trimmer caps TC-1 and TC-2. CAR-1 is a narrow and
rectangular chromate colored (Yellow/Green) metal can near the Final board.
You can shine a light into the adjustment holes and see the white labeling
for the USB and LSB carrier oscillator trimmer caps.

You will need a long insulated thin flat bladed adjustment tool to insert thru the top PC board and engage the slot in the ceramic trimmer caps deep in the hole.

Facing the can the top right hole is for USB. The middle hole is for LSB. The third hole is VR-1 trimmer for balance. Dont adjust VR-1. You cannot properly adjust it using the Moni method.

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Terry K9TW

[Non-text portions of this message have been removed]

56859. Re: [TS-520_820_530_830] Re: Info regolation tone microphone for ts 820s

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-04 21:06:35 UTC
From: francotocci@virgilio.it
Topic: 56845 Message: 56859

Hello before doing this reglazione SSB tc1 and tc2 in cw power it was 100 watts, but if I'm going to move those two trimmers modify the modulation becomes more beautiful, but lost power during cw agreement,

Iz8jfa
franco

-------Original Message-------

From: wagstw46@... [TS-520_820_530_830]
Date: 04/04/2017 22:40:23
To: TS-520_820_530_830@yahoogroups.com
Subject: Re: [TS-520_820_530_830] Re: Info regolation tone microphone for ts 820s

Where is the CAR Level pot set? Did you try opening it full clockwise?

What is IP indicating at 50 watts output?

What is HV indicating? If around 450vdc you have lost one of the two HV filter caps.

How much experience do you have loading the TS820S?

If limited experience go to You Tube and download Alan W2AEW Video #153.

Terry K9TW

---In TS-520_820_530_830@yahoogroups.com, <francotocc i@...> wrote :

Adjustment is fine, but the power in cw with GVW to 50 watts is decreased At

I adjusted tc1 and tc2 now modulation is perfect but the power in cw is dimuita to 50 watts

Modulation is now perfect both in lsb and USB, but in cw with ptt pressed the power is decreased to 50 watts

Iz8jfa
franco

-------Original Message-------

From: wagstw46@... [TS-520_820_530_830]
Date: 04/04/2017 14:02:07
To: TS-520_820_530_830@yahoogroups.com
Subject: Re: [TS-520_820_530_830] Re: Info regolation tone microphone for ts

820s

Go to W0NTA website and down load the Service Manual. Dick Housden has nice high res copies. Look at page 50 and you will see steps for adjusting the

Carrier Set Point (SSB frequency response).

Locate the Carrier Osc can on the bottom side of your radio.

CAUTION: Be aware at the HV capacitors and the HV rectifier board there is

900vdc with enough ampacity to kill you.

You will be adjusting trimmer caps TC-1 and TC-2. CAR-1 is a narrow and rectangular chromate colored (Yellow/Green) metal can near the Final board. You can shine a light into the adjustment holes and see the white labeling for the USB and LSB carrier oscillator trimmer caps.

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Facing the can the top right hole is for USB. The middle hole is for LSB. The third hole is VR-1 trimmer for balance. Dont adjust VR-1. You cannot properly adjust it using the Moni method.

Be aware that many of the steps in the Service Manual are inaccurate. When

in doubt ask on this forum.

Terry K9TW

[Non-text portions of this message have been removed]

[Non-text portions of this message have been removed]

56860. Vintage Hybrid Net update (April 2, 2017)

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-04 22:12:30 UTC
From: Mark Gilger
Topic: 56860 Message: 56860

Net Info:
Saturday: 7.235 ☐ 7.233 @ 3:30pm Eastern following the Swan Tech Net
Sunday: 14.316 @ 1800 UTC following the ICOM net

Web Site:
<http://www.wb4hfn.com/KENWOOD/KenwoodHomePage.htm>http://www.wb4hfn.com/KENWOOD/KenwoodHomePage.htm

The net started its existence on November 1st,
2011. The yearly check-in totals are posted at the bottom of this message.

The Saturday net was run by me, WB0IQK. There
were 18 stations checking in under GOOD band conditions.

We had the following number of radios checking in.
2 running TS-520(x)
1 running TS-530(x)
1 running TS-820(x)
6 running TS-830S
1 running TS-510
0 running TS-511
0 running TS-515
0 running 599 twins
0 running TS-900

I was running my TS-830S + Drake L4B amplifier.

The Sunday net was run by me, WB0IQK. There were
10 stations checking in under POOR band
conditions. There was a DX contest running that was causing a lot of QRM.

We had the following number of radios checking in.
3 running TS-520(x)
0 running TS-530(x)
0 running TS-820(x)
2 running TS-830S
0 running TS-510
0 running TS-511
0 running TS-515
0 running 599 twins
1 running TS-900

I was running my TS-830S + Drake L-4B amplifier.

We have been having several people checking in
regularly with their TS-430, TS-440, and
TS-940☐s, which of course is not a hybrid,

although over 30+ years old. Everyone is welcome
as long as they have an interest in the older equipment.

If anyone would be interested in filling in as a
net control station, please send me an email.
Currently it's just myself, Jimmy, WB2KNR, and
Greg, WQ0P, and Rodger, K1HH has agreed to help
with relays . I would like to get several more.
If we do, we can alternate so everyone might be
on a 3-4 week rotation. It's a lot of fun and a
good way to make sure you station is optimized.

For anyone that has not heard, we have a new web
site that WB4HFN is hosting. He currently has a
very nice site for Drake, Collins and Heathkit
and now Kenwood Hybrids. Good quality manuals
plus sale flyers and brochures will be found
here, along with user supplied information for all Hybrids.

His URL is:
<http://www.wb4hfn.com/KENWOOD/KenwoodHomePage.htm>http://www.wb4hfn.com/KENWOOD/KenwoodHo
mePage.htm

To date, we have had the following check-in:

Nov. 2011 ☐ Oct. 2012 Saturday total 754
check-ins, Sunday total 563 check-ins
Nov. 2012 - Oct. 2013 Saturdays total 828 check-ins, Sunday total 609 check-ins
Nov. 2013 - Oct. 2014 Saturdays total 842 check-ins, Sunday total 744 check-ins
Nov. 2014 ☐ Oct 2015 Saturdays total 962 check-ins, Sunday total 669 check-ins
Nov. 2015 ☐ Oct 2016 Saturdays total 807 check-ins, Sunday total 628 check-ins

November 2016, Saturday net total = 80, Sunday total = 68
December 2016, Saturday net total = 73, Sunday total = 69
January 2017, Saturday net total = 50, Sunday total = 90
February 2017, Saturday net total = 85, Sunday total = 66
March 2017, Saturday net total = 53, Sunday total = 47
April 2017, Saturday net total = 19, Sunday total = 9 (Month to date)

Net Info:
Saturday: 7.235 @ 3:30 Eastern following the Swan Tech Net
Sunday: 14.316 @ 1800 UTC following the ICOM net

Web Site:
<http://www.wb4hfn.com/KENWOOD/KenwoodHomePage.htm>http://www.wb4hfn.com/KENWOOD/KenwoodHo
mePage.htm

73's,
Mark, WB0IQK

56861. Re: [TS-520_820_530_830] Re: Info regolation tone microphone for ts 820s

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-05 00:35:34 UTC
From: wagstw46@...
Topic: 56845 Message: 56861

Franco:

You did not answer any of my questions?

I have two more questions:

1. Do you have an optional CW filter installed in your TS820S?

2. If no optional CW filter installed then your RF drive signal has to pass thru the SSB xtal filter. If you adjusted TC-1 CW Send Carrier Oscillator trimmer cap on the CAR2 board by mistake that could account for low RF output power.

TC-1 on the CAR2 board (just above T1 orange core) is to be set to 8830.700 in CW mode. Best to start there and then peak the ALC (RF drive) meter indication by fine tuning TC-1. If you have a frequency counter connect it to TP-5 on the IF board and see if the Carrier Oscillator reads close to 8830.700. If it reads around 8830.200 that means you adjusted the wrong TC-1 trimmer and would account for only 50 watts out.

In CW mode you should be able to adjust either the TC-1 LSB or the TC-2 USB CAR1 trimmer caps and see no change in RF drive (ALC) indication or RF output power.

Terry K9TW

56862. Re: [TS-520_820_530_830] Re: Info regolation tone microphone for ts 820s

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-05 10:00:01 UTC
From: francotocci@virgilio.it
Topic: 56845 Message: 56862

Good morning I set tc1 in car2 board, now everything works well in cw power

is 100 watts, the trimmer tc2 What sets ?, I shot this trimmer and changes

the modulation SSB what sets tc2 car2 trimmer on board?

I adjusted also tc2 trimmer car2 card, I noticed that changes modulation in ssb I solved now my ts 820 for ssb get exactly what goes has set the tc2

trimmer on the car 2 card, sorry for English I use a translator only speak

Italian

This trimmer what goes regulate tc2 of car2 ?

Greetings await response

Now all the power cw works 100 watt 100x100 thanks :)

Iz8jfa
franco

-------Original Message-------

From: wagstw46@... [TS-520_820_530_830]
Date: 05/04/2017 02:35:36
To: TS-520_820_530_830@yahoogroups.com
Subject: Re: [TS-520_820_530_830] Re: Info regolation tone microphone for ts 820s

Franco:

You did not answer any of my questions?

I have two more questions:

1. Do you have an optional CW filter installed in your TS820S?

2. If no optional CW filter installed then your RF drive signal has to pass thru the SSB xtal filter. If you adjusted TC-1 CW Send Carrier Oscillator trimmer cap on the CAR2 board by mistake that could account for low RF output power.

TC-1 on the CAR2 board (just above T1 orange core) is to be set t o 8830.700 in CW mode. Best to start there and then peak the ALC (RF drive) meter indication by fine tuning TC-1. If you have a frequency counter connect it to TP-5 on the IF board and see if the Carrier Oscillator reads close to 8830.700. If it reads around 8830.200 that means you adjusted the wrong TC-1

trimmer and would account for only 50 watts out.

In CW mode you should be able to adjust either the TC-1 LSB or the TC-2 USB CAR1 trimmer caps and see no change in RF drive (ALC) indication or RF output power.

Terry K9TW

[Non-text portions of this message have been removed]

56863. Re: [TS-520_820_530_830] Re: Info regolation tone microphone for ts 820s

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-05 16:17:31 UTC
From: wagstw46@...
Topic: 56845 Message: 56863

Franco:
FSK is Frequency Shift Keying or RTTY. Basically it is a form of digital modulation where the CW carrier is shifted in frequency. Too many keystrokes required here to give a primer on FSK.

Unless you are planning on running FSK there is no reason to adjust TC-2 trimmer on CAR2 board. It adjust the narrow mark frequency or higher frequency shift.

56864. Re: [TS-520_820_530_830] Re: Info regolation tone microphone for ts 820s

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-05 16:24:25 UTC
From: wagstw46@...
Topic: 56845 Message: 56864

I forgot to mention if you place the mode switch in FSK the CW output power is reduced to approx 50 watts so that you do not exceed the plate dissipation of your two final tubes and destroy them.

This is accomplished by placing a 12k resistor in series with the screen grid supply to the Final board which reduces the screen grid voltage to around 150vdc. This reduces the plate current to safe level for RTTY operation.

All of the other KW hybrids when running any of the digital modes you most reduce the CAR Level pot to reduce the plate current to address this high duty cycle mode.

Terry K9TW

56865. Re: TS-830s carrier oscillator/alignment results--- question

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-05 16:44:27 UTC
From: loueverettsr@...
Topic: 56766 Message: 56865

Terry -

Can I use this procedure, you describe, on the TS-820S, as well?

Lou WA5LOU

56866. Re: TS-830s carrier oscillator/alignment results--- question

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-05 20:03:57 UTC
From: wagstw46@...
Topic: 56766 Message: 56866

Lou:

Not sure what procedure/method you are asking about?

Can adjust any of the KW Hybrid LSB/USB Carrier Oscillators by a variety of means that I have posted here quite a few times in the past.

I like the mic line injection wattmeter method the best, but since SSB frequency response has element of personal preference there are several methods that can be used. This method is the one that KW uses in all the Service Manuals for the Hybrids, but sometimes may be a bit cryptic for folks. Especially true with the 520 series as they combine about 3 steps in to one paragraph. I think that the INRAD filter mic line injection method is posted in the Files section.

I think most recent response I made was to a fellow who was having trouble adjusting the oscillators to precisely the frequency of the LSB and USB crystals and I just wanted to point out to him that those frequencies are just a starting point. Especially true as the crystal ladder filter Fc (center frequency) is most likely not exactly as specified after all these years.

Do you have a frequency counter? If you are a bit nervous about adjusting your carrier oscillators then connect freq counter to TP-5 on the IF board and measure the present LSB and USB carrier oscillator frequencies and write them down so you can get back to the as found set points. Then you can try any of the methods that I described.

Given that the TS820S has the Moni function it would probably be the easiest for you to first try.

Absent a Moni function people do use the Marker Zero Beat method. I believe Richard Measures describes it in the maintenance section of TS830 Survival Guide. I think he directs that you adjust the trimmer caps for an S2 to S3 zero beat. If you dont like how the radio sounds at that point can always adjust it for S4 to S5 zero beat and see how that sounds to your ear. In my experience this method works better on the 530/830 models as zero beat is much more discernable than on the other models.

Recognize that how radio sounds in Rx wont be precisely how it sounds in Tx as the audio response in Rx is not soley determined by the pass band of the IF filter. There is some contribution from the Product detector low pass filter and from the Audio output amp RC components.

Terry K9TW

56867. Re: [TS-520_820_530_830] Re: TS-830s carrier oscillator/alignment results--- question

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-05 20:16:48 UTC
From: Lou Everett, Sr.
Topic: 56766 Message: 56867

I was asking if the procedures you outlined for the on the TS-830S would work on the TS-820S.

Lou WA5LOU

On Wed, Apr 5, 2017 at 4:03 PM, wagstw46@... [TS-520_820_530_830] <TS-520_820_530_830@yahoogroups.com> wrote:

>
>
> Lou:
>
> Not sure what procedure/method you are asking about?
>
> Can adjust any of the KW Hybrid LSB/USB Carrier Oscillators by a variety
> of means that I have posted here quite a few times in the past.
>
> I like the mic line injection wattmeter method the best, but since SSB
> frequency response has element of personal preference there are several
> methods that can be used. This method is the one that KW uses in all the
> Service Manuals for the Hybrids, but sometimes may be a bit cryptic for
> folks. Especially true with the 520 series as they combine about 3 steps in
> to one paragraph. I think that the INRAD filter mic line injection method
> is posted in the Files section.
>
> I think most recent response I made was to a fellow who was having trouble
> adjusting the oscillators to precisely the frequency of the LSB and USB
> crystals and I just wanted to point out to him that those frequencies are
> just a starting point. Especially true as the crystal ladder filter Fc
> (center frequency) is most likely not exactly as specified after all these
> years.
>
> Do you have a frequency counter? If you are a bit nervous about adjusting
> your carrier oscillators then connect freq counter to TP-5 on the IF board
> and measure the present LSB and USB carrier oscillator frequencies and
> write them down so you can get back to the as found set points. Then you
> can try any of the methods that I described.
>
> Given that the TS820S has the Moni function it would probably be the
> easiest for you to first try.
>
> Absent a Moni function people do use the Marker Zero Beat method. I
> believe Richard Measures describes it in the maintenance section of TS830
> Survival Guide. I think he directs that you adjust the trimmer caps for an

> S2 to S3 zero beat. If you dont like how the radio sounds at that point can
> always adjust it for S4 to S5 zero beat and see how that sounds to your
> ear. In my experience this method works better on the 530/830 models as
> zero beat is much more discernable than on the other models.
>
> Recognize that how radio sounds in Rx wont be precisely how it sounds in
> Tx as the audio response in Rx is not soley determined by the pass band of
> the IF filter. There is some contribution from the Product detector low
> pass filter and from the Audio output amp RC components.
>
> Terry K9TW
>
>
>

56868. Re: [TS-520_820_530_830] Re: TS-830s carrier oscillator/alignment results--- question

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-05 20:38:37 UTC
From: wagstw46@...
Topic: 56766 Message: 56868

YES--- Again two best methods are the mic line injection method and the audio spectrum analyzer/ PC sound card method in that order. Some folks do just set both oscillators to the respective crystal frequency using a frequency counter and call it good enough.

Terry K9TW

56869. Reley problem ts 820s+problem cover drift frequency

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-05 22:49:39 UTC
From: francotocci@virgilio.it
Topic: 56869 Message: 56869

Hi I need to solve two problems on my TS 820,
1) of the time between the transmission and the reception it remains silent
for about 1 second
2) if you move the radio or I press the upper cover the radio frequency
moves

You can attach a video so I see the problem?

Expect your answers

Iz8jfa
Franco

[Non-text portions of this message have been removed]

56870. Post For Sale

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-05 22:57:29 UTC
From: redondotom@...
Topic: 56870 Message: 56870

Can we not post For Sale Items here?.

it is. go to the attached link below. upon acceptance to the group, and at the first of every month every member gets the general group policy and the rules for items for sale. PSE also remember to sign you msgs/posts

73 Joe wb7uqu
group co-owner

https://xa.yimg.com/df/TS-520_820_530_830/Rules%2C+For+Sale+or+Want+to+buy+Posts+?token=uRMfrwjlB90d0pH1_9Sgcn4fn52qNFGf-Sru2o9404BgZVFH3D79uTcR2Q19DGGCm-SKFnU3eyMC-hgoGRoqoVb42JhAqZQRpfaY6TPOthnRfNHx1KaYXEl-2zg5_8rduWkncRP6AhGRs_nVdsEsQ77m6T-BMA&type=download https://xa.yimg.com/df/TS-520_820_530_830/Rules%2C+For+Sale+or+Want+to+buy+Posts+?token=uRMfrwjlB90d0pH1_9Sgcn4fn52qNFGf-Sru2o9404BgZVFH3D79uTcR2Q19DGGCm-SKFnU3eyMC-hgoGRoqoVb42JhAqZQRpfaY6TPOthnRfNHx1KaYXEl-2zg5_8rduWkncRP6AhGRs_nVdsEsQ77m6T-BMA&type=download

56871. Reley problem ts 820s+problem cover drift frequency

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-07 13:32:47 UTC
From: francotocci@...
Topic: 56869 Message: 56871

Hi I need to solve two problems on my TS 820,
1) of the time between the transmission and the reception it remains silent
for about 1 second
2) if you move the radio or I press the upper cover the radio frequency
moves

You can attach a video so I see the problem?

Expect your answers

Iz8jfa
Franco

56872. Re: Reley problem ts 820s+problem cover drift frequency

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-07 14:59:57 UTC
From: croberts@...
Topic: 56869 Message: 56872

Make certain the VOX is OFF.

I have made that mistake.

Chuck
N2KWO

56874. Re: Hybrid Net Update (March 26, 2017)

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-09 18:55:49 UTC
From: Mark Gilger
Topic: 56779 Message: 56874

Halden,
Band pretty well sucked today. Stations that are normally arm chair copy, I had to dig for. Sorry you were not able to check in.

73's,
Mark, WB0IQK

56875. HYBRID NET UPDATE (April 9, 2017)

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-09 18:57:36 UTC
From: Mark Gilger
Topic: 56875 Message: 56875

Net Info:
Saturday: 7.235 ☐ 7.233 @ 3:30pm Eastern following the Swan Tech Net
Sunday: 14.316 @ 1800 UTC following the ICOM net

Web Site:
<http://www.wb4hfn.com/KENWOOD/KenwoodHomePage.htm>http://www.wb4hfn.com/KENWOOD/KenwoodHomePage.htm

The net started its existence on November 1st,
2011. The yearly check-in totals are posted at the bottom of this message.

The Saturday net was run by Jimmy, WB2KNR. There
were 5 stations checking in under POOR band conditions.

We had the following number of radios checking in.
3 running TS-520(x)
1 running TS-530(x)
0 running TS-820(x)
0 running TS-830S
0 running TS-510
0 running TS-511
0 running TS-515
0 running 599 twins
0 running TS-900

I was running my TS-200S + Heathkit SB-200 amplifier.

The Sunday net was run by me, WB0IQK. There were
13 stations checking in under POOR band
conditions. There was a DX contest running that was causing a lot of QRM.

We had the following number of radios checking in.
3 running TS-520(x)
1 running TS-530(x)
1 running TS-820(x)
3 running TS-830S
0 running TS-510
0 running TS-511
0 running TS-515
0 running 599 twins
0 running TS-900

I was running my TS-830S + Drake L-4B amplifier.

We have been having several people checking in
regularly with their TS-430, TS-440, and
TS-940☐s, which of course is not a hybrid,

although over 30+ years old. Everyone is welcome
as long as they have an interest in the older equipment.

If anyone would be interested in filling in as a
net control station, please send me an email.
Currently it's just myself, Jimmy, WB2KNR, and
Greg, WQ0P, and Rodger, K1HH has agreed to help
with relays . I would like to get several more.
If we do, we can alternate so everyone might be
on a 3-4 week rotation. It's a lot of fun and a
good way to make sure you station is optimized.

For anyone that has not heard, we have a new web
site that WB4HFN is hosting. He currently has a
very nice site for Drake, Collins and Heathkit
and now Kenwood Hybrids. Good quality manuals
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To date, we have had the following check-in:

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check-ins, Sunday total 563 check-ins
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November 2016, Saturday net total = 80, Sunday total = 68
December 2016, Saturday net total = 73, Sunday total = 69
January 2017, Saturday net total = 50, Sunday total = 90
February 2017, Saturday net total = 85, Sunday total = 66
March 2017, Saturday net total = 53, Sunday total = 47
April 2017, Saturday net total = 24, Sunday total = 23 (Month to date)

Net Info:
Saturday: 7.235 @ 3:30 Eastern following the Swan Tech Net
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Web Site:
<http://www.wb4hfn.com/KENWOOD/KenwoodHomePage.htm>http://www.wb4hfn.com/KENWOOD/KenwoodHo
mePage.htm

73's,
Mark, WB0IQK

56876. Re: [TS-520_820_530_830] Re: Hybrid Net Update (March 26, 2017)

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-09 18:27:43 UTC
From: Joe Laffey
Topic: 56779 Message: 56876

On Sun, 9 Apr 2017, incorridge@... [TS-520_820_530_830] wrote:

> Hi Mark TS-520 etc net newbie here. Been listening on 14.316 for 10 minutes and haven't heard anyone. Just a few voices at 14.3158 but they are too weak for me to figure out who they are or what they're talking about.
> TS-830S and dipole. Dipole faces the wrong way for this net, but it's hard to move a 100-foot fir tree!
> Just heard a voice on 14.3159 describing the weather. But didn't hear the ID.

I was on a moment ago, and listening. I did get a response to my calling,
but it was a little weak. I could not copy the other call, but it sounded
like he was saying someone else was talking that I could not hear.

Not sure where the other stations are based. I am in St. Louis, MO

It seems the band is kinda poor...

--
73
Joe Laffey
KE0KZI

56877. Re: [TS-520_820_530_830] Re: Hybrid Net Update (March 26, 2017)

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-10 16:24:34 UTC
From: wwill@...
Topic: 56779 Message: 56877

http://prop.hfradio.org/ http://prop.hfradio.org/ -- Many useful tools for determining band opening/closing.

http://dx.qsl.net/propagation/ http://dx.qsl.net/propagation/ -- Particularly good for space weather.

http://www.hamqsl.com/solar3.html http://www.hamqsl.com/solar3.html -- More online tools, some the same, as the hfradio.org site. Still useful.

http://www.eham.net/DX/propagation http://www.eham.net/DX/propagation -- Concise compilation, sort of an "at a glance" quick picture.

56878. TS-830 Bandswitch Final unit alignment ?

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-10 18:21:26 UTC
From: bobcolenso@...
Topic: 56878 Message: 56878

OK, I have a silly question. TS830s bandswitch, the statement...
"Look at the shaft in the final unit. It should have one flat facing down and the other facing to the right. The front shaft should be on 30m. "

So, my silly question is...Is that my right facing the radio from the operating position, or the radio's right as it is facing me. Or, another way, is one flat down and the other flat towards the tubes, or one flat down and the other flat facing the Load control cap?

Thanks,
Bob - KD8WU

56879. Re: [TS-520_820_530_830] TS-830 Bandswitch Final unit alignment ?

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-10 21:09:26 UTC
From: Joseph Stiles
Topic: 56878 Message: 56879

Bob,
  When looking at the rig from the front, one "flat" of the shaft of S22(tank selector switch in the final compartment) should point down, the other to the right(or towards the final tubes)
 73
Joe wb7uqu

On Monday, April 10, 2017 11:21 AM, "bobcolenso@... [TS-520_820_530_830]" <TS-520_820_530_830@yahoogroups.com> wrote:

  OK, I have a silly question. TS830s bandswitch, the statement..."Look at the shaft in the final unit. It should have one flat facing down and the other facing to the right. The front shaft should be on 30m. "
So, my silly question is...Is that my right facing the radio from the operating position, or the radio's right as it is facing me. Or, another way, is one flat down and the other flat towards the tubes, or one flat down and the other flat facing the Load control cap?

Thanks,Bob - KD8WU

56880. Re: TS-830 Bandswitch Final unit alignment ?

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-11 01:06:12 UTC
From: bobcolenso@...
Topic: 56878 Message: 56880

Thank you Joe.

56881. HP8924C $$$ worth it?

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-11 11:39:50 UTC
From: bobcolenso@...
Topic: 56881 Message: 56881

I'd like to get more into repairing and doing complete service manual alignments on hybrids and such. Looking through the service manual, the list of required equipment is rather lengthy and presumably expensive.

Enter the HP8924C Service Monitor. I've read about these, and though expensive it looks like it has most everything I would need.

Right now I own seven (yes, 7) TS-830s's. My BABY and its companion, the rest I bought to work on. Hybrid Jim use to charge $350.00 for basic repair and alignment. Less than three of these would pay for the HP.

Anyone have experience with, or an opinion about, the HP8924C.

Thanks,
Bob - KD8WU

56882. Re: HP8924C $$$ worth it?

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-11 16:36:36 UTC
From: wwill@...
Topic: 56881 Message: 56882

It's a great piece of gear IF:

it's still calibrated.

it has the input module to accept more than 3 or 6 Watts. (Can use the sampler if it is only a low-power module model, but make sure you KNOW it has a 100 W input section before you just run the coax into the service monitor!!)

Most all of the functions will be completely useless, but the analogue sections (a small subset of what this CDMA analysis box will do) will cover about anything you need to do with an Kenwood hybrid.

The learning curve is kinda steep. Find the manuals and look into some of the on-line stuff like YouTube, which I think shows some people using one to service a radio. Or get somebody local who has experience with one to show you how.

All I know about them. Wish I had one, some days.

--
wes will
N9KDY

56883. RE: [TS-520_820_530_830] Re: HP8924C $$$ worth it?

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-11 16:52:03 UTC
From: Bill
Topic: 56881 Message: 56883

Service Monitor, Smervish Monitor !

I do all my troubleshooting, alignment and testing with a few pieces of low cost gear.

Tube tester

VTVM

VOM

Scope

RF Probe

Wattmeter

Field Strength Meter

Alignment tools

K2WH

From: TS-520_820_530_830@yahoogroups.com [mailto:TS-520_820_530_830@yahoogroups.com]
Sent: Tuesday, April 11, 2017 12:37 PM
To: TS-520_820_530_830@yahoogroups.com
Subject: [TS-520_820_530_830] Re: HP8924C $$$ worth it?

It's a great piece of gear IF:

it's still calibrated.

it has the input module to accept more than 3 or 6 Watts. (Can use the sampler if it is only a low-power module model, but make sure you KNOW it has a 100 W input section before you just run the coax into the service monitor!!)

Most all of the functions will be completely useless, but the analogue sections (a small subset of what this CDMA analysis box will do) will cover about anything you need to do with an Kenwood hybrid.

The learning curve is kinda steep. Find the manuals and look into some of the on-line stuff like YouTube, which I think shows some people using one to service a radio. Or get somebody local who has experience with one to show you how.

All I know about them. Wish I had one, some days.

--
wes will
N9KDY

56884. Re: [TS-520_820_530_830] Re: HP8924C $$$ worth it?

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-11 18:41:24 UTC
From: Jan Servaites
Topic: 56881 Message: 56884

?? I see no signal generator.
One cannot get along without one.
Signal gen. & O-scope pretty much the primary troubleshooting instruments.
Jan N8CBX
On 4/11/2017 12:52 PM, 'Bill' k2wh@... [TS-520_820_530_830] wrote:
>
> Service Monitor, Smervish Monitor !
>
> I do all my troubleshooting, alignment and testing with a few pieces
> of low cost gear.
>
> Tube tester
>
> VTVM
>
> VOM
>
> Scope
>
> RF Probe
>
> Wattmeter
>
> Field Strength Meter
>
> Alignment tools
>
> K2WH
>
>

This email has been checked for viruses by Avast antivirus software.
https://www.avast.com/antivirus

56885. RE: [TS-520_820_530_830] Re: HP8924C $$$ worth it?

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-11 23:28:31 UTC
From: Bill
Topic: 56881 Message: 56885

Sorry, forgot to include that.

I use a URM-25D, provides all the signal one needs for servicing these rigs from RF to IF and anywhere in between.

Also, forgot a frequency counter. I have 2 of em.

K2WH

From: TS-520_820_530_830@yahoogroups.com [mailto:TS-520_820_530_830@yahoogroups.com]
Sent: Tuesday, April 11, 2017 2:41 PM
To: TS-520_820_530_830@yahoogroups.com
Subject: Re: [TS-520_820_530_830] Re: HP8924C $$$ worth it?

?? I see no signal generator.
One cannot get along without one.
Signal gen. & O-scope pretty much the primary troubleshooting instruments.
Jan N8CBX

On 4/11/2017 12:52 PM, 'Bill' k2wh@... [TS-520_820_530_830] wrote:

Service Monitor, Smervish Monitor !

I do all my troubleshooting, alignment and testing with a few pieces of low cost gear.

Tube tester

VTVM

VOM

Scope

RF Probe

Wattmeter

Field Strength Meter

Alignment tools

K2WH

<https://www.avast.com/sig-email?utm_medium=email&utm_source=link&utm_campaign=sig-email&utm_content=emailclient> Avast logo

This email has been checked for viruses by Avast antivirus software.
www.avast.com <https://www.avast.com/sig-email?utm_medium=email&utm_source=link&utm_campai

gn=sig-email&utm_content=emailclient>

56886. RE: [TS-520_820_530_830] Re: HP8924C $$$ worth it?

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-11 18:52:57 UTC
From: Joe
Topic: 56881 Message: 56886

GULP! My house is being repainted and reroofed for less money! ;) J!

I agree with Jan! Where is the mandatory signal generator? I think I bought a TSG-17 a couple of years ago, new, for under 50 bucks! (Now I see one for 85 bucks, BIN and free shipping on eBay! Not great, 100khz – 150mhz, but very usable!

Joe – W7RKN

From: TS-520_820_530_830@yahoogroups.com [mailto:TS-520_820_530_830@yahoogroups.com]
Subject: RE: [TS-520_820_530_830] Re: HP8924C $$$ worth it?

I do all my troubleshooting, alignment and testing with a few pieces of low cost gear.

Tube tester

VTVM

VOM

Scope

RF Probe

Wattmeter

Field Strength Meter

Alignment tools

56887. Re: HP8924C $$$ worth it?

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-12 14:21:10 UTC
From: wallydoc@...
Topic: 56881 Message: 56887

Bob: I have a HP E 6380, similar to the unit being discussed. It is a great bargain at $1K. If you do not like it it should not be hard to unload at that price. The sig gen is very good and lets you insert the sidebands. It receives off the air quite well, will receive AM, SSB and FM. Two audio generators. Spec analyzer.is good.

If you need any info, go to the HP 8920 Yahoo group. They are quite helpful.

On my unit. the power meter does not work accurately at say, over ten watts at HF frequency. It reads about twice the real power. This is typical of these units.However it is still useful since most of the time you are looking for peak power while using spectrum to tell if there are any unwanted signals.
You can use an attenuator on the 8924C to read power on higher signals. However, most units have this built in and can read 60 or 100W depending on the unit. Please check.

For more info look at Amtronix website and click on "differences between HP 8920....."

Amtronix wants more than $3K for it and sells quite a few.

It is a modern unit and has menus within menus.

The scope is pretty useless, it is a slow audio freq scope.

The unit also disconnects and alarms if you accidentally touch a high volt line.

In response to those who say they can use much less expensive equipment to do what they need:

All of you are absolutely correct. This thing is not necessary for repairing a 520.
I bought it because I love test equipment. However, I use it all the time.

Other considerations however include the pretty good spec scope and the ability to modulate the RF gen carrier by both AM and FM.

If you are going to do a lot of service on many different rigs, this is a good piece of equip.

Again, my unit does not read high power HF accurately, you get a high value about twice the real RF power. Theses units are made for cell tower frequencies primarily.

Another comment: I don't think anyone starts with one of these units, but I suppose it is not a bad idea.
You will need lots of Jumpers and Adapters. You will also need a separate scope and probes. And you will need a decent dummy load and power meter.
Good Luck

Wally KC9INK

56888. Re: [TS-520_820_530_830] HP8924C $$$ worth it?

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-12 04:58:24 UTC
From: Brenton Meadows
Topic: 56881 Message: 56888

Love my 8924c, bought for $1100 aud, just an incredible tool you will nwver

regret.
Cheers brenton vk3cm

On 11 Apr. 2017 9:39 pm, "bobcolenso@yahoo.com [TS-520_820_530_830]" <
TS-520_820_530_830@yahoogroups.com> wrote:

>
>
> I'd like to get more into repairing and doing complete service manual
> alignments on hybrids and such. Looking through the service manual, the
> list of required equipment is rather lengthy and presumably expensive.
>
>
> Enter the HP8924C Service Monitor. I've read about these, and though
> expensive it looks like it has most everything I would need.
>
>
> Right now I own seven (yes, 7) TS-830s's. My BABY and its companion, the
> rest I bought to work on. Hybrid Jim use to charge $350.00 for basic
> repair and alignment. Less than three of these would pay for the HP.
>
>
> Anyone have experience with, or an opinion about, the HP8924C.
>
>
>
> Thanks,
>
> Bob - KD8WU
>
>

56889. Re: HP8924C $$$ worth it?

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-12 03:08:03 UTC
From: Greg Wasik
Topic: 56881 Message: 56889

When I grew up, we were so poor that we couldn't even afford a voltmeter. I remember found an old boyscout compass and wrapped some turns of wire around it crosswise across the face of the compass. This would indicate DC current if the compass needle deflected from magnetic north. To use it as a field strength meter for RF, it would need a diode detector in series. Of course we were too poor to afford diodes, but you could make one with a rusty razor blade and a pencil lead.

Greg
K1YW

56890. RE: [TS-520_820_530_830] Re: HP8924C $$$ worth it?

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-12 19:01:48 UTC
From: Bill
Topic: 56881 Message: 56890

Taint nothing.

To find out if I had RF out, I would use NE-2 neon bulbs and hold them close to the antenna or what I thought was an antenna.

To determine frequency, you just had to look at the color of the ionization. Purple/blue VHF/UHF, Red, Orange, HF.

K2WH

From: TS-520_820_530_830@yahoogroups.com [mailto:TS-520_820_530_830@yahoogroups.com]
Sent: Tuesday, April 11, 2017 11:08 PM
To: TS-520_820_530_830@yahoogroups.com
Subject: [TS-520_820_530_830] Re: HP8924C $$$ worth it?

When I grew up, we were so poor that we couldn't even afford a voltmeter. I remember found an old boyscout compass and wrapped some turns of wire around it crosswise across the face of the compass. This would indicate DC current if the compass needle deflected from magnetic north. To use it as a field strength meter for RF, it would need a diode detector in series. Of course we were too poor to afford diodes, but you could make one with a rusty razor blade and a pencil lead.

Greg

K1YW

56891. TS-820 Voltages on RF card

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-12 22:38:04 UTC
From: hdhender@...
Topic: 56891 Message: 56891

I have a TS-820 that has been boxed for about 5 years. Went to put it back on the air and found that it will not txmit. The radio powers up and I can receive stations with not any trouble. After checking several things from the group I started checking voltages from the final section forward. I have found the voltages on Q6 on the RF board a bit strange. The drain should be 12.5 in receive and 13.0 in transmit. They are 11.9 and 12.6. The source should be 1.5 (recv) and 0.0 (xmit). They are 1.1 and -1.6. Is this transistor having issues or are the strange voltages coming from deeper inside? I do not have a local ham (Elmer) with trouble-shooting skills close by so have to this group for help.

73
Dee
VE6HDH

56892. Re: [TS-520_820_530_830] Re: HP8924C $$$ worth it?

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-12 23:41:00 UTC
From: Michael Nachlinger
Topic: 56881 Message: 56892

Now that is a cool trick!

Mike
K7SJI

On 4/12/17 12:01 PM, 'Bill' k2wh@... [TS-520_820_530_830] wrote:
>
> Taint nothing.
>
> To find out if I had RF out, I would use NE-2 neon bulbs and hold them
> close to the antenna or what I thought was an antenna.
>
> To determine frequency, you just had to look at the color of the
> ionization. Purple/blue VHF/UHF, Red, Orange, HF.
>
> K2WH
>
> *From:*TS-520_820_530_830@yahoogroups.com
> [mailto:TS-520_820_530_830@yahoogroups.com]
> *Sent:* Tuesday, April 11, 2017 11:08 PM
> *To:* TS-520_820_530_830@yahoogroups.com
> *Subject:* [TS-520_820_530_830] Re: HP8924C $$$ worth it?
>
> When I grew up, we were so poor that we couldn't even afford a
> voltmeter. I remember found an old boyscout compass and wrapped some
> turns of wire around it crosswise across the face of the compass. This
> would indicate DC current if the compass needle deflected from
> magnetic north. To use it as a field strength meter for RF, it would
> need a diode detector in series. Of course we were too poor to afford
> diodes, but you could make one with a rusty razor blade and a pencil lead.
>
> Greg
>
> K1YW
>
>

56893. Re: [TS-520_820_530_830] Re: HP8924C $$$ worth it?

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-13 10:59:09 UTC
From: Lou Blasco
Topic: 56881 Message: 56893

This reminds me of a Monty Python sketch,

We were so poor,
We were so poor we couldn't afford to have power connected to our house,
We'd have to carry the electricity home from the power station in buckets!

Hi of course

Lou
VK3ALB

At 13:08 12/04/2017, you wrote:
>
>
>When I grew up, we were so poor that we couldn't even afford a
>voltmeter. I remember found an old boyscout compass and wrapped some
>turns of wire around it crosswise across the face of the compass.
>This would indicate DC current if the compass needle deflected from
>magnetic north. To use it as a field strength meter for RF, it would
>need a diode detector in series. Of course we were too poor to
>afford diodes, but you could make one with a rusty razor blade and a
>pencil lead.
>
>Greg
>K1YW

56894. Re: HP8924C $$$ worth it?

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-13 11:26:05 UTC
From: bobcolenso@...
Topic: 56881 Message: 56894

Thanks for the input guys. I like the one about making a diode out of a razor blade and lead pencil.

I was curious about how good the HP's scope functions are, and what other test equipment is needed. The '830's service manual lists, amongst others;
VTVM or DVM (my Fluke 115 will do)
O-scope
Sweep Gen
Standard Sig Gen
Freq. counter
Spectrum Analyzer
A.F. Gen (maybe I can use my SM-220?)
..... and I was hoping this could do all or most of that.

I got to consider one of these after looking at individual pieces of test gear. E-bay had a GSP-810, a 150 KHz to 1 GHz Spectrum Analyzer with tracking generator, for $450. A decent used o-scope runs $3-500, and I'm already north of the HP's cost.

Bob
KD8WU

56896. Re: TS-820 Voltages on RF card

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-13 13:11:30 UTC
From: wagstw46@...
Topic: 56891 Message: 56896

Dee:

Not sure how you got to Q6 troubleshooting a NO transmit condition?

Q6 is one of two dual gate mosfets in the receiver RIF mixer and has nothing directly related to a No transmit problem. Very rare for Q6 or Q7 to be bad. You dont mention Q6 Gate bias voltages, but it sounds like you may not be seeing RLR and RLT. This can be due to dirty RL-1 aux control relay contacts or dirty or bad molex crimp connectors at RF-2. Relay is on bottom center of the rig. Pull and measure and clean the contacts. May not help, but wont hurt.

You need to better define what No Transmit means.

1. Can you set the resting or idling plate current to 60ma?
2. Can you peak the RF drive (ALC indication) in Tune Mode?

You state that you measured voltages at the Final board. Does this mean you verified at the Final tube socket lugs that you have proper screen grid voltage, proper cut-off bias voltage and that it switches to proper operating bias when you flip to Send?

Terry K9TW

56897. 830 replacing resistors on final board

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-13 14:01:58 UTC
From: kg6dhq@...
Topic: 56897 Message: 56897

Hello, I recently purchased a resistor replacement pack from Ken, K4EAA, for the final board on my 830. This is my first attempt at working on one of these radios. It already appears that I am doing something wrong, but not serious. I unwrapped the blue drive wire from the final board.
Maybe a silly question, but how do you hold the final board to work on it ? I have a case of fat fingers and poor eyesight. A third hand would make working on this thing a bit easier. OH well. I am learning, and will have fun doing so.

Bob, KG6DHQ

56898. Re: HP8924C $$$ worth it?

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-13 14:18:10 UTC
From: wallydoc@...
Topic: 56881 Message: 56898

Bob: I you buy the HP (which you will not regret especially if you like fixing things), the only additional thing you will need is an old 100 MHz O scope which could have a freq counter built in (very useful, you don't have to switch back and forth with your instruments).
You can get a 30 Mhz scope at a hamfest for $50 or less. It is enough for the 820. If you plan on working on other equip, 100 Hz is nice because some older ham equip (and newer) use higher IF freq (60 MHz, for example)
Good Luck
Wally KC9INK

56899. Re: TS-820 Voltages on RF card

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-13 16:15:05 UTC
From: hdhender@...
Topic: 56891 Message: 56899

Hello, Terry. On the final board voltages were as follows: V1-pin 3 - 0v, pin 5 - -98v(-52v), pin 2 - 12.5v(12.5v), pin 1 - 0v(0v). Same for V2. The voltage at the top of the coil just before the antenna is 956v. As the voltages were the same on both tubes I started to go backwards in the schematic. Tuneup and voltage measurements done at frequency 14.175. Trying to set the voltages as stated in the O.M, the meter just barely deflects to the right and a dummy load watt meter shows about 8ma.
Following section 4.11 (pg18) of the O.M, I set the radio to the same settings as table 2 in the manual. Plate idling current just deflects the meter to just under 10ma. Drive tuning deflects the meter to 250 maximum. Plate tuning makes no change to meter deflection. Have not tried Plate or load tuning as yet. As this radio is new to me, I may not be setting the controls correctly but they are set as per the O.M. Thanks for your time and help. I am hoping that this is something simple.

approved as a courtesy....PSE remember to properly sign ur posts/msgs

73 Joe wb7uqu
group co-owner

56900. Re: TS-520S - Removing mods & SSB Output Issue

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-13 10:38:08 UTC
From: christopherlarwood@...
Topic: 51751 Message: 56900

I've revisited this thread I started a year ago and didn't realise there had been a suggestion on what to look at from Terry. So I will do as suggested and report back the outcome.

I have been trying to use this radio from my workshed to call into the Boat Anchor net & the bottleshop net run in Southern Australia but this intermittent fault makes it miss more than hit to get a transmission out.

Radio still tunes up strongly- 100+W out

Some observations from Tuesday night was I was getting no audio out with mic gain in normal setting at all. Very little when mic gain on full. However with the processor on and mic gain full I was making a transmission.

I haven't touched the mods but would prefer they be taken out of radio - I've hesitated as there is no documentation of the mods or how their removal make affect other parts of the radio.

approved as a courtesy....PSE remember to properly sign ur post/msgs per group rules.

tnx n 73

Joe wb7uqu
group co-owner

56901. Re: HP8924C $$$ worth it?

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-13 18:15:56 UTC
From: bobcolenso@...
Topic: 56881 Message: 56901

Guess maybe I should have read the ad (QRZ.com) a little better. The seller states..."This unit does NOT have option 55 that would support use below 30 Mhz.", although I can't seem to be able to find anything on Option 55 on the internet.

<sigh>

56902. Re: TS520S VFO output signal level

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-13 19:09:34 UTC
From: lonelyone_64109@...
Topic: 56832 Message: 56902

Thanks for your help and sorry that I haven't gotten back with you all. I did the voltage checks like you said and still didn't find anything definitive. As I have been waiting for a week on the parts (D3 and L6) I got tired of waiting.

I did ohmmeter checks on all components and all checked good. So on a whim I replaced D3 with a 1N4148 and fired up the VFO. Now I have about 2 V of signal at the output jack, with a supply voltage of 9 volts and 20 ma current draw (I haven't tried measuring the actual current yet. The 20 ma is what my power supply reads).

WB0CJB

56903. Re: TS-820 Voltages on RF card

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-13 21:11:47 UTC
From: wagstw46@...
Topic: 56891 Message: 56903

PIn 3 is the screen grid and you should have approx 260vdc with the SG switch on rear of the rig turned ON and approx -100vdc with the SG switch off (not Zero volts). As someone else suggested make sure the SG switch is ON.

With the SG off cant set the resting plate current (Ip to 60ma) or load the radio, but should be able to peak the Drive (the first loading step).

Go to You Tube and watch W2AEW video #153 on how to load your hybrid.

Terry K9TW

56904. Re: TS-520S - Removing mods & SSB Output Issue

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-13 21:18:17 UTC
From: wagstw46@...
Topic: 51751 Message: 56904

Very common problem to have no audio with the RF processor switch off or not depressed. The contacts are dirty. Try wiggling the grey push button knob, pulling on it, and moving it side to side as you talk into the mic and listen on the Moni.

I carefully drill a small hole in the upper right corner of the metal switch housing using a Pin Vise and a series of small letter drill bits. Can then press the red plastic nozzle of DeOxit D5 and pressurize the cavity and inject contact cleaner. Have to be very careful not to let the drill bits penetrate inside the switch body and damage the mechanism.

The reason I drill at the upper right corner is because there is a dimple there where the back plate has been folded over. Sometimes even a very small hole as a place to start a small drill bit.

Terry K9TW

---In TS-520_820_530_830@yahoogroups.com, <christopherlarwood@...> wrote :

I've revisited this thread I started a year ago and didn't realise there had been a suggestion on what to look at from Terry. So I will do as suggested and report back the outcome.

I have been trying to use this radio from my workshed to call into the Boat Anchor net & the bottleshop net run in Southern Australia but this intermittent fault makes it miss more than hit to get a transmission out.

Radio still tunes up strongly- 100+W out

Some observations from Tuesday night was I was getting no audio out with mic gain in normal setting at all. Very little when mic gain on full. However with the processor on and mic gain full I was making a transmission.

I haven't touched the mods but would prefer they be taken out of radio - I've hesitated as there is no documentation of the mods or how their removal make affect other parts of the radio.

approved as a courtesy....PSE remember to properly sign ur post/msgs per group rules.

tnx n 73

Joe wb7uqu
group co-owner

56905. Re: [TS-520_820_530_830] We Were So Poor....

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-14 00:22:56 UTC
From: John Davidson
Topic: 56881 Message: 56905

When I was a kid we were so poor I could not get my folks to buy me a receiver so I walked across the tracks to a better neighborhood where a ham Operator lived and snuck down the alley and listened to his radio thru an open basement window. That's how I practiced copying Morse ! My radio is Ham Radio...CW is Real Radio 73, John...K8JD

From: "Lou Blasco radio@ozemail.com.au [TS-520_820_530_830]"
<TS-520_820_530_830@yahoogroups.com>
To: TS-520_820_530_830@yahoogroups.com
Sent: Thursday, April 13, 2017 7:00 AM
Subject: Re: [TS-520_820_530_830] Re: HP8924C $$$ worth it?

  This reminds me of a Monty Python sketch,

We were so poor,
We were so poor we couldn't afford to have power connected to our house,
We'd have to carry the electricity home from the power station in buckets!

Hi of course

Lou
VK3ALB

At 13:08 12/04/2017, you wrote:
>
>
>When I grew up, we were so poor that we couldn't even afford a
>voltmeter. I remember found an old boyscout compass and wrapped some
>turns of wire around it crosswise across the face of the compass.

56906. Re: TS-820 Voltages on RF card

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-14 15:02:20 UTC
From: hdhender@...
Topic: 56891 Message: 56906

VE6HDH. Dee Ok, let me try again. Good morning, Terry.
Thanks for your response. I have previously watched the video that you listed and get to a point where there is no meter deflection(or almost none). Rechecked the voltages on the final tubes, Pins 1 & 3 -0v(0v), Pin 2 - 12.5v(12.5v), Pin 5 - -98(-52v).
During the tune-up process I set the radio controls as stated in table 2 o pg.19 of the O.M. After following the procedure steps starting at 4.11. Plate idle current deflects very little and slight adjustment of the rear bias makes no change. I get drive tuning ALC deflection max at 250 on scale. I stop at this point as plate tuning in CW mode seems pointless without the other setting showing correct results.
I now see the value of a local amatuer for instant hands-on help. Thanks for your time in helping get this rig on the air.

Regards,

Dee

VE6HDH

56907. Re: 830 replacing resistors on final board

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-14 03:46:18 UTC
From: incorridge@...
Topic: 56897 Message: 56907

Hi Bob, I unscrewed the board from its mount and let it flop around supported only by the various wires connected to it when I changed out the cathode resistors recently. A way to make it flap around less is to get a long screw with the same thread as the mounting screw, run it through the PCB, then through a spacer and then into one of the threaded holes in the chassis. If a suitable spacer isn't in your hardware collection already, you could make a good-enough one by taking a piece of sheet steel from a food can or aluminium from a pop can, trim it to the needed width, and wrap it around the screw. With the board a few cm away from the radio, you now have access to both sides of the PCB.
Cheers
Halden NR7V

56908. 830s rectifier board Q and A?

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-14 04:49:21 UTC
From: ivanpeter8@...
Topic: 56908 Message: 56908

Hello all
I have recently aquired an 830s with blown diodes D8 through D11 on the rectifier board
The set came with a spare rectifier board which is identical in every way with the exception that RL1 is absent with what looks like a resistor and perhaps a zena diode in its place.

1) is this an upgraded board that can be fitted straight in?

2) what should i check to find the cause of the original failure?

Also the replacement board is in really good shape and i would like to make it right for use as the original board is in really poor shape on the foil side but does have the absent relay if needed.

Thanks in advance for any help,im new to the Hybrid repair scene and also this group,so please if i do something against the group policy....kindly put me in my place :)

73's

Ivan ZL1OTF

56909. ts 830s rectifier boards

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-14 05:22:44 UTC
From: IVAN NELSON
Topic: 56909 Message: 56909

Hello all

i have recentlty aquired an 830s with diodes D8 through D11 blown on the rectifier board.

A couple of questions

The rig also came with an identical replacement board apart from RL1 which is absent and with what looks like a resistor and maybe a Zener diode positioned in place of the relay,can i just change the old board out for the new one?

The old board is in poor condition on the foil side.

Also what would cause the diodes to leave town?

The ham i bought it from was operating at 60w when all stopped.

Thanks in advance

Ivan ZL1OTF 73's

56910. Re: TS-520S - Removing mods & SSB Output Issue

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-14 08:05:25 UTC
From: christopherlarwood@...
Topic: 51751 Message: 56910

I have tested the NOR pin on the gen board and it shows as expected. 7 volts with processor off, 0 volts with processor on. But the covers are off the radio again and ready to do any/all suggested tests.

Will get some contact cleaner into the switch to see how that changes matters

there is also the matter of the mods but I'll leave them be if they are not affecting normal operation

vk5ltd

56911. TS 820S Circuit Diagrams

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-14 16:22:49 UTC
From: frankm@...
Topic: 56911 Message: 56911

Hello Group
I have a problem that seems to be over looked or has no solution in regard to the service manuals pictures of the foil sides of the circuit boards and electrical diagrams in general. There seems to be no logical series of either that can be followed accurately. For instance the foil sides of the boards in the service manuals (all that I have downloaded and the 2 I received with my radio) have series numbers J25-XXXX-03 and my boards are all marked J25-XXXX-13. Some of the changes are minor some not and circuits have parts changes and are numbered differently making positive identification impossible. Do any of members here have updated information on this that can be shared? I have asked people who repair these hybrids and they have no details to share I thought perhaps someone here may some knowledge to share on this dilemma. I know these radios were manufactured over a period of years but for Kenwood to modify its product and supply the same service manuals for what I assume to be the first generation 820 is a bit weird.
73's
Frank
K2PTZ

56912. Re: [TS-520_820_530_830] Re: 830 replacing resistors on final board

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-14 19:00:55 UTC
From: BOB KG6DHQ
Topic: 56897 Message: 56912

Thank you for the idea, I did not think of that. I screwed the final board to a piece of wood. That was a little better, at least not moving too much when trying to pull at the resistors.

Thanks, I need all the help I can get ! Bob, KG6DHQ

On Thu, 4/13/17, incorridge@... [TS-520_820_530_830] <TS-520_820_530_830@yahoogroups.com> wrote:

Subject: [TS-520_820_530_830] Re: 830 replacing resistors on final board
To: TS-520_820_530_830@yahoogroups.com
Date: Thursday, April 13, 2017, 8:46 PM

Hi Bob,I unscrewed the board from its
mount and let it flop around supported only by the various
wires connected to it when I changed out the cathode
resistors recently. A way to make it flap around less is
to get a long screw with the same thread as the mounting
screw, run it through the PCB, then through a spacer and
then into one of the threaded holes in the chassis. If a
suitable spacer isn't in your hardware collection
already, you could make a good-enough one by taking a piece
of sheet steel from a food can or aluminium from a pop can,
trim it to the needed width, and wrap it around the screw.
 With the board a few cm away from the radio, you now have
access to both sides of the
PCB.CheersHalden NR7V

56913. Re: TS-820 Voltages on RF card

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-14 19:32:34 UTC
From: wagstw46@...
Topic: 56891 Message: 56913

Go to the HV Rectifier board and see if you have approx 260vdc screen grid voltage at PD2 wire wrap post.

You have to have 210A screen grid voltage as the Driver tube is producing RF drive that you can peak (250ma meter indication is meaningless). You are not setting a level you are adjusting Mixer and Plate LC tuned circuits to resonance which results in a peak in RF drive voltage.

If you have SG voltage at PD2 go back to Final board and measure at the SG wire wrap post (has heavy white/purple wire on it). May have broken lead wire there. On rare occasions may have lost both of the 100 ohm screen grid stopper resistors. Also, not common to have an open L2 choke.

If nothing at PD2 wire wrap post on HV Rect Board measure SG-1 wire wrap post (blue). If nothing at SG-1 measure at the SG-2 wire wrap post (green). Not common but could have broken off wire on the Mode switch.

Be extremely careful with you hands and fingers and keep control of meter test leads as you will be in close proximity of 900vdc with enough ampacity to kill you. HV filter caps are " hot" and so is the HV rectifier board.

Assuming you have no nominal 260vdc at the SG wire wrap post on the Final board you just need to follow the schematic back to the HV rectifier board where the Screen grid voltage is produced to determine where you are losing it at.

There is no point in trying to set the resting plate current to 60ma if you have no screen grid voltage and certainly no point in trying to load if you cant set the resting plate current to 60ma.

Terry K9TW

56914. TS-520 low sensitivity/S-meter inoperative

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-14 19:38:22 UTC
From: nz8j@...
Topic: 56914 Message: 56914

Hi,
I just picked up a TS-520 with external VFO and speaker. It seems to have good TX power but the RX sensitivity is really low, I can barely hear signals that are strong on another radio. I've peaked the drive and RF gain is set to max.

The marker is very weak across all bands. One oddity is that when listening to a weak marker signal (anywhere within the band) pushing the WWV button increases the volume of the signal.

The S-meter reads S9+25 all the time in RX and the only thing that changes it is if I reduce the RF gain the S-Meter pegs to the right as I would expect. The meter works fine in TX.

Any suggestions as to the low sensitivity?

Thanks
Tim
NZ8J

56915. Re: TS-520 low sensitivity/S-meter inoperative

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-15 13:17:26 UTC
From: wagstw46@...
Topic: 56914 Message: 56915

What does the regulated 9vdc read on the AVR board? What does the RF-1 AGC reference voltage read on the AVR board. With a standing 25 over on the S-meter one of two possibilities comes to mind.

1. RF-1 is very low. Should be approx 3.3vdc. RF-1 establishes the AGC buss voltage level. AGC buss is the DC control or servo voltage to all the gate 2 leads of the dual gate mosfet gain controlled RF and IF amps.

2. S meter span trim pot grossly misadjusted. After setting the zero trim pot the span pot is set for S9 indication with 50uv or -73dBm signal at the SO-239. This of course has no affect on receiver sensitivity.

Also, can measure the resistance from the SO-239 to the RF board by probing center pin of the SO-239 and the center conductor of the Xverter IN RCA jack. Ideally should be 1 ohm or less. While measuring exercise the JJY/WWV push button. This test measures the resistance of the ANT/TR relay NC contact as well as the JJY/WWV contact resistance.

Terry K9TW

56916. Re: [TS-520_820_530_830] Re: 830 replacing resistors on final board

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-15 14:00:47 UTC
From: wagstw46@...
Topic: 56897 Message: 56916

Bob no reason to secure the board to unsolder the cathode or sg stopper resistors?

Leave all 7 board hold down screws snug and desolder all 12 resistor leads. Best if you have a vacuum desoldering tool, but it can be done with solder wick.

Typically the resistors will then pretty much just fall out. Might have to gently poke at the ends with pointed end of soldering aide tool.

There are some builds (factory and owner performed) where the resistor leads have been folded over tight against the pad and then soldered (a dumb and unnecessary method). In that event will have to apply soldering iron to the lead after removing as much solder as possible and apply thin blade tool to lift the lead upright to be able to completely desolder it. With that kind of build even more important to leave all the hold down screws in place.

Terry K9TW

56917. Re: [TS-520_820_530_830] Re: 830 replacing resistors on final board

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-15 14:24:43 UTC
From: BOB KG6DHQ
Topic: 56897 Message: 56917

Another great idea, as I am new to all this. Ask a question, and you can get some really good answers. I am taking my time doing this, probably too long. My wife keeps me side tracked with a lot of "Honey-Do's." I think I will purchase a desoldering/vaccuum tool. Any that you might recommend ? I guess I don't need anything too fancy, but would spend the money to get something that works well.

Bob Holland, KG6DHQ

On Sat, 4/15/17, wagstw46@... [TS-520_820_530_830] <TS-520_820_530_830@yahoogroups.com> wrote:

Subject: Re: [TS-520_820_530_830] Re: 830 replacing resistors on final board
To: TS-520_820_530_830@yahoogroups.com
Date: Saturday, April 15, 2017, 7:00 AM

Bob no reason to
secure the board to unsolder the cathode or sg stopper
resistors?
Leave all 7 board hold down screws
snug and desolder all 12 resistor leads. Best if you have a
vacuum desoldering tool, but it can be done with solder
wick.
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tool.
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build even more important to leave all the hold down screws
in place.
Terry K9TW

56918. Re: [TS-520_820_530_830] Re: 830 replacing resistors on final board

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-15 14:29:58 UTC
From: Hugh Butler
Topic: 56897 Message: 56918

Bob,

I purchased an Aoyue tool from Amazon and it works great. Don't know what I would do without it.

Hugh

Sent from my iPad

> On Apr 15, 2017, at 10:24 AM, BOB KG6DHQ kg6dhq@... [TS-520_820_530_830] <TS-520_820_530_830@yahoogroups.com> wrote:
>
> Another great idea, as I am new to all this. Ask a question, and you can get some really good answers. I am taking my time doing this, probably too long. My wife keeps me side tracked with a lot of "Honey-Do's." I think I will purchase a desoldering/vaccuum tool. Any that you might recommend ? I guess I don't need anything too fancy, but would spend the money to get something that works well.
>
> Bob Holland, KG6DHQ
> ---
> On Sat, 4/15/17, wagstw46@... [TS-520_820_530_830] <TS-520_820_530_830@yahoogroups.com> wrote:
>
> Subject: Re: [TS-520_820_530_830] Re: 830 replacing resistors on final board
> To: TS-520_820_530_830@yahoogroups.com
> Date: Saturday, April 15, 2017, 7:00 AM
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> vacuum desoldering tool, but it can be done with solder
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> Typically the resistors will then

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> ends with pointed end of soldering aide
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> possible and apply thin blade tool to lift the lead upright
> to be able to completely desolder it. With that kind of
> build even more important to leave all the hold down screws
> in place.
> Terry K9TW
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56919. Re: TS-520S - Removing mods & SSB Output Issue

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-15 05:50:22 UTC
From: christopherlarwood@...
Topic: 51751 Message: 56919

There's no easy access to the mic gain pot but I've sprayed contact cleaner into what I can get to. I don't have a drill to put any holes in that tiny enclosure. Manipulating the control and also processor on off, I STILL get little audio out in SSB with mic gain on full. Have tried wriggling the shaft, rotating control. No difference.

What else could I check on the Gen board to narrow down where the problem is?

Vk5LTD

56920. Re: [TS-520_820_530_830] Re: 830 replacing resistors on final board

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-15 15:08:17 UTC
From: Joseph Stiles
Topic: 56897 Message: 56920

Bob-kg6dhq,
Terry-k9tw is 100% about leaving the final board screwed down, and desoldering components. Just the "DRV" wire need be removed before gently flipping the board over.
As far as a desoldering tool...since I do not repair even close to what Terry does, I have used a very simple self-contained tool. It's sold by Jameco (Jameco.com) and the item # is 2168261. It looks like a pencil-type soldering iron with a solder sucker all in a nice easy to hold unit....the tips are replaceable...and it's easy to clean out....about $27.00. Mine has been going strong for 3 years...and have had to replace the tip once...lost count of the number of desloders though.....
 73
Joe wb7uqu

On Saturday, April 15, 2017 7:51 AM, "Hugh Butler hubut864@... [TS-520_820_530_830]" <TS-520_820_530_830@yahoogroups.com> wrote:

  Bob,
I purchased an Aoyue tool from Amazon and it works great. Don't know what I would do without it.
Hugh

Sent from my iPad
On Apr 15, 2017, at 10:24 AM, BOB KG6DHQ kg6dhq@... [TS-520_820_530_830] <TS-520_820_530_830@yahoogroups.com> wrote:

  Another great idea, as I am new to all this. Ask a question, and you can get some really good answers. I am taking my time doing this, probably too long. My wife keeps me side tracked with a lot of "Honey-Do's." I think I will purchase a desoldering/vaccuum tool. Any that you might recommend ? I guess I don't need anything too fancy, but would spend the money to get something that works well.

Bob Holland, KG6DHQ

On Sat, 4/15/17, wagstw46@... [TS-520_820_530_830] <TS-520_820_530_830@yahoogroups.com> wrote:

Subject: Re: [TS-520_820_530_830] Re: 830 replacing resistors on final board
To: TS-520_820_530_830@yahoogroups.com
Date: Saturday, April 15, 2017, 7:00 AM

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There are some builds (factory and owner performed) where the resistor leads have been folded over tight against the pad and then soldered (a dumb and unnecessary method). In that event will have to apply soldering iron to the lead after removing as much solder as possible and apply thin blade tool to lift the lead upright to be able to completely desolder it. With that kind of build even more important to leave all the hold down screws in place.
Terry K9TW

56921. Re: TS-520S - Removing mods & SSB Output Issue

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-15 15:33:15 UTC
From: wagstw46@...
Topic: 51751 Message: 56921

It is not the Mic gain pot. It is the RF Processor Push Button Switch just above the comp control and to the immediate left of the panel meter.

Terry K9TW

56922. Re: TS-520 low sensitivity/S-meter inoperative

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-15 15:17:53 UTC
From: nz8j@...
Topic: 56914 Message: 56922

Terry, You hit the nail on the head, one look at the AVR board and it was obvious what the problem was, VR3 was falling apart, (separating). The metal inner part was tilted out about 1/8". One of the tabs holding it together was missing. The only reason it hadn't completely fallen apart was a resistor next to it holding it up. There was no fixing it. Just touching it made it fall completely apart. I removed the metal portion. Just jumpering across VR3 brought the s-meter down and the sensivity back up to where it should be.

Now the problem, replacing VR3. It doesn't look like it's going to be an easy job without unsoldering several wires to get at the bottom to remove it. Also finding a replacement might be difficult.

Thanks for the tip to check the AVR board, I'm sure it won't be my last question as I try to get this thing up and running properly.
73
Tim
NZ8J

---In TS-520_820_530_830@yahoogroups.com, <wagstw46@...> wrote :

What does the regulated 9vdc read on the AVR board? What does the RF-1 AGC reference voltage read on the AVR board. With a standing 25 over on the S-meter one of two possibilities comes to mind.

1. RF-1 is very low. Should be approx 3.3vdc. RF-1 establishes the AGC buss voltage level. AGC buss is the DC control or servo voltage to all the gate 2 leads of the dual gate mosfet gain controlled RF and IF amps.

2. S meter span trim pot grossly misadjusted. After setting the zero trim pot the span pot is set for S9 indication with 50uv or -73dBm signal at the SO-239. This of course has no affect on receiver sensitivity.

Also, can measure the resistance from the SO-239 to the RF board by probing center pin of the SO-239 and the center conductor of the Xverter IN RCA jack. Ideally should be 1 ohm or less. While measuring exercise the JJY/WWV push button. This test measures the resistance of the ANT/TR relay NC contact as well as the JJY/WWV contact resistance.

Terry K9TW

56923. Re: TS-520 low sensitivity/S-meter inoperative

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-15 20:14:56 UTC
From: wagstw46@...
Topic: 56914 Message: 56923

Tim:

Shouldnt have to unsolder any wires. Can usually just carefully fold the board over. Just make sure when folded back that havent broken any wires off the wire wrap post and havent pinched any wires between the board and metal shield plate. Make sure to put the nylon insulators back in place at one end.These prevent circ current in the metal shield from the transformer flux field.

Yes these old style carbon trimmers are getting hard to find. May find them on Ebay? You could just place a fixed resistor in its place. Dont go crazy increasing the voltage much above 3.3vdc.

Almost any time you see the S meter pegged or pretty far upscale you can just about bet that the AGC buss voltage is down. The meter is a JFET based reverse reading voltmeter with the gate hanging on the buss. Sometimes the FET will short and meter will peg hard FSD and gain will be way down. Other times as in this case RF-1 is low.

If you need help might contact Jimmy Lamanteer WB2KNR as he specializes in TS520 series repair.

Terry K9TW

56924. Re: TS-520S - Removing mods & SSB Output Issue

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-16 01:39:01 UTC
From: christopherlarwood@...
Topic: 51751 Message: 56924

Terry- this is a 520s not 830s - the processor on off is in the shaft of the mic gain.

I've given that a good blast of contact cleaner- no effect
vk5ltd

56925. Re: TS-520S - Removing mods & SSB Output Issue

Yahoo group: TS-520_820_530_830 (2017)
Date: 2017-04-16 12:26:09 UTC
From: wagstw46@...
Topic: 51751 Message: 56925

Sorry! Not sure why but I thought we were talking about a TS830S. Too many irons in the fire!

Not common for the TS520S to have problem with the processor switch contacts.

Terry K9TW